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Triumvirate of Business.

THE HARDWARE MAN uses shoes and flour, reads newspapers and books, buys groceries and furniture, and receives the protection of municipal and federal laws. In a word, he is a social unit, not an isolated individual. His problems, therefore, are not confined to the hardware trade, nor are his rights and duties circumscribed by the commodities in which he deals Commerce is a complex of all the arts and industries. Just as the lungs can not function without the heart nor apart from the body, so no manufacturer or merchant can carry on his business independently of his fellow citizens.

The more accurately these truths are perceived by the industrial leaders of our country, the more certain are we to work out an adequate solution of the difficulties which confront us. It is with a sense of gratification, therefore, that we take cognizance of the broadminded view of the situation expressed by M. D. Hussie in his annual address as President of the National Retail Hardware Association, which is reprinted elsewhere in this issue of AMERICAN ARTISAN AND HARDWARE RECORD. Speaking to the twentieth annual convention of his organization, held June 24, 25, 26, and 27, 1919, in Pittsburgh, Pennsylvania, he said that it should be the study of every manufacturer, jobber, and retailer how best to stimulate and safeguard business. Everyone has a duty to perform, he declared in these words:

"Be he ever so big in the business world, or ever so small, this is a duty confronting him which he owes to himself, to the particular craft he represents, and to his country, for I believe that the business men of this country have it within their power to prove the salvation of the country.

"It is a fundamental truth that business of whatever kind can not long exist unless it delivers some specific service to the public. The manufacturer, converting basic raw material into useful or desirable articles, has taken the first step, but unless he can succeed in getting his product into the hands of the largest possible number of ultimate consumers, at the lowest possible cost, he is not fulfilling his mission and can not hope long to exist. It is up to the manufacturer, therefore, to seek means towards this end, and call to his assistance other agencies.

"Experience has demonstrated that the best method of distribution consists in having stocks warehoused in various convenient centers to be drawn on in turn by smaller and more varied and diversified stocks, located in every town, hamlet, and village in the country.

"The manufacturer has thus linked himself up with the jobber and retailer, and this triumvirate constitutes the three legged stool of business. Upon this three legged stool, figuratively speaking, rests the ultimate consumer; and it is our duty so to stabilize our business that the said ultimate consumer will not be made seasick by the uneasy motions of his base of support."

The triumvirate of business designated by Mr. Hussie is not in any sense an autocracy. It represents the most economical and scientific combination of functions in modern merchandising. Its advantages and services are limited only by the degree of cooperation in production and distribution. There is enough for all. Prosperity can be brought into every shop and store and home by fair dealing and proper organization. Destructive competition, price-cutting, and other harmful practices can be eradicated only by agreement among men of business. Such agreement can be effected by association of interests and interchange of ideas between trade organizations.

Does Supply and Demand Rule Labor?

INSTANCES ARE MULTIPLYING of a radically new attitude toward labor on the part of big corporations. The Carr mills of Durham, North Carolina, have just put into effect an industrial democracy in the operation and management of the great hosiery factories financed and controlled by General Carr and his son, Julian S. Carr, Jr. This is only one of many examples indicative of the same tendency. It is important alike to merchants and manufacturers to inform themselves regarding the development of this phase in the economic processes of America. In this connection it is well carefully to study the statements of W. C. Teagle, president of the Standard Oil Company of New Jersey with respect to the changing aspects of industry. Discussing the industrial relationship plan of his company the other day, he declared that the law of supply and demand is more or less a fallacy in so far as it regards labor and capital.

"The true value of labor is the wealth it produces; the less it produces the less there is to share up in the community," said Mr. Teagle. "And I want to add this, basing my opinion on the results obtained during the last year by the company of which I am president: There is no problem of industry which may not be successfully solved.

"The Standard Oil Company of New Jersey for the last year has been working under a joint conference

industrial relationship plan, involving the relations—some of them complex—of 11,119 employes in five refineries. It is perhaps a record in the industrial history of this country that the various wage increases and adjustments made during the last year by our company have all been settled in joint conferences between the employes and the management, and in conformity with the announced policy of the company of paying at least the scale of wages prevailing in the localities in which its plants are situated. The importance of the wage decisions reached in these joint conferences is indicated by the fact that during the year there has been added approximately $5,000,000 to the annual payroll of the company.

"Many people have come to believe that the so-called law of supply and demand is a fallacy underlying most of the failures of the industrial system of the last two or three generations. The Right Honorable W. Adamson, British member of Parliament and labor leader, is one of those who questions this principle, declaring that it is no system at all which allows a shoemaker to be out of work while thousands go unshod. The same is true of the tailor, the butcher, the baker, and all other trades. The law of supply and demand in the past has been so dogmatically asserted that labor has accepted it, and logically deduced therefrom that if values were created by supply and demand, then the less the work performed the more valuable labor would become. The true value of labor is the wealth it produces; the less it produces the less there is to share up in the community.

"In other words, it may well be argued that, instead of the law of supply and demand being the controlling factor today the controlling factor actually is the productivity of labor. Mr. Pomeroy Burton, a few days ago in an able address upon English labor conditions, pointed out that the chief error of trades unionism in England has been its deliberate and persistent policy of restricting output and opposing the introduction of labor-saving machinery. America, he said, was prosperous because the average production per workman in this country was three times that of the British workman. I believe the American workman appreciates this truth of the value of production better than the European workman, and as a result, the American workman leads in individual prosperity.

"Then we come to the partnership of the community as an owner of resources, which is a phase of the situation which until recently has received little attention The community possesses jointly immense natural wealth—it may be mines, forests, fisheries, or other natural resources—which, through a combination of labor and capital, results in the wealth of the community.

"When the industrial worker, the brain worker and capital combine in the development of the resources of the community the result is the production of wealth; and the problem of the future will be properly to apportion this wealth on equitable terms.

"It follows that in so far as American labor generally appreciates this situation, and understands that wealth is not the product of labor or capital alone, labor will coöperate with the management in the production of the profits."

Show The Goods To Customer.

An error into which some retailers fall is that of arranging their stock with a view to convenient storage rather than rapid selling. Many sales are lost in the course of a week for the apparently insignificant reason that goods are so placed on the shelves that the labels can not be read. A paint manufacturer is reported to have taken the trouble to investigate the reason why his publicity campaign was not bringing estimated results. He found that he was losing a lot of business and a lot of the results he should have obtained from the thousands of dollars he was spending in advertising because a great number of the dealers paid little or no attention to the manner in which the cans were placed on the shelves. This manufacturer's products featured the name of the paint on one side of the can only. Here it was very prominently displayed and in all his advertising matter this was the side that was shown in the illustrations.

Can See No Danger of Revolution.

Prophets of calamity do much harm to business. The influence of their gloomy forebodings spreads as a plague unless sharp measures are taken to offset it. Already damage has been done to the growth of domestic commerce by predictions of dire disaster from bolshevists in the United States. Timid folk of narrowed vision are frightened by such evil prognostications. As a consequence, they cut down their purchases to an inescapable minimum. The resulting reduction in sales discourages the merchant. In turn, he is more disposed to give credence to pessimistic forecasts of business. In order to overcome the bad effects of such talk, hardware dealers, sheet metal contractors, and merchants in general should make it their duty to proclaim faith in the soundness of American institutions. They will find stout material for such constructive work in the commencement address which Judge Gary of the United States Steel Corporation delivered to the students of Trinity College, Hartford, Connecticut.

"Those who claim that large numbers of working men in this country could be induced to participate in any attempt to override law or order misjudge and underrate them," he declared. "The great majority are opposed, and of this majority there are in control the young men and the young women, the pride and security of the Nation.

"We may not expect perfection in economic enterprise and management. Perhaps we shall not see universal, uninterrupted tranquility even in this highly civilized, progressive and prosperous country. The workingmen are credited with worthy achievement or charged with lawless and destructive tendencies, perhaps in both respects in unjustified measure in most instances. The final attitude of the large majority, certainly in the United States, will be right. Their own welfare will be thus promoted.

"Many of the wage earners have become property owners, owning the houses in which they reside. Some are holders of interest-bearing securities. The number of this character of investors is increasing. They have as keen a desire to see the institutions of this country protected as those who have greater riches,

and they may be relied upon to lend their influence and their votes in favor of the protection of property and person. Opportunity must be given to the workmen to increase their pecuniary holdings as far as practicable. To this end the employers will do their part."

RANDOM NOTES AND SKETCHES.

By Sidney Arnold.

Some business men do not understand that all business men are advertisers, whether they want to be or not. Every business man is either losing through bad advertising or profiting from good advertising all the time. Everybody advertises—for better or worse. Smiles, frowns, speech, manner, cleanliness, neatness, promptness, accuracy and system are some of the forms of advertising that every man in business, from the presidents and general managers down to the youngest clerks, is constantly employing, consciously or otherwise. Nobody can avoid advertising, because nobody can avoid winning friends or making enemies.

* * *

Talking about the folly of overcautiousness, my friend Frank I. Clark of Iver Johnson's Arms and Cycle Works, Fitchburg, Massachusetts, related the following incident:

Aunt Tabitha and Uncle Hiram started for a holiday visit to New York and at Philadelphia Uncle Hiram got out to buy a newspaper and the train went off without him. But the railroad people were more than kind to Uncle Hiram in his predicament. They put him on an extra rapid express and he actually arrived in New York twenty minutes ahead of Aunt Tabitha. He stood at the exit in his black Sunday suit, carpet bag in hand, when she came forth.

"Here we are again, hey?" he said, clasping her waist jocosely. "I tell ye, Tabithy, gal, I thought I'd lost ye for good."

But Aunt Tabithy had drawn herself up straight and stiff. She was frowning as black as a thundercloud.

"You clear out, mister," she hissed. "None o' yer New York confidence tricks on me. I left my Hiram in Philadelphia."

* * *

Palmer Holmes, Chicago manager of Lalance and Grosjean Manufacturing Company, calls attention to the significant fact that there was not one single instance of cowardice among American soldiers in the war.

"Always on investigation any suggestion of funk on the part of the doughboy has been cleared up. Like the case of the young man who said:

" 'I'd like to go into the infantry, but my mother wouldn't let me.'

" 'What!' cried a listener. 'A big six-footer like you, and your mother wouldn't let you?'

" 'No,' said the young man calmly, 'so I've volunteered for mine sweeping.'

" 'But, good gracious, mine sweeping is far more dangerous than common soldiering!'

" 'I know that,' replied the young man calmly, 'but mother doesn't.' "

Apropos of false impressions, my friend Valentine A. Fath of the Wrought Iron Range Company, St. Louis, Missouri, narrates this veracious tale:

Two young kindergarten teachers, intelligent and attractive, while riding downtown in a street car were engaged in an animated discussion. In the seat behind them sat a good-natured, fatherly-looking Irishman enjoying a nap. Finally one kindergartner inquired of the other:

"How many children have you?"

"Twenty-two," she replied. "And how many have you?"

"Oh, I have only nineteen," replied the first.

At this point the Irishman, now wide awake with astonishment, leaned forward in his seat and, without any formality, inquired in a loud voice:

"What part of Ireland did youse come from?"

* * *

My friend Paul E. Heller of Heller Brothers Company, Newark, New Jersey, tells a Mark Twain anecdote which is new to me:

Mark Twain at a dinner at the Authors' Club said: "Speaking of fresh eggs, I am reminded of the town of Squash. In my early lecturing days I went to Squash to lecture in Temperance Hall, arriving in the afternoon. The town seemed poorly billed. I thought I'd find out if the people knew anything at all about what was in store for them. So I turned in at the general store. 'Good afternoon, friend,' I said to the general storekeeper. 'Any entertainment here tonight to help a stranger while away the evening?' The general storekeeper, who was sorting mackerel, straightened up, wiped his briny hands on his apron and said: 'I expect there's goin' to be a lecture. I been sellin' eggs all day'."

* * *

There is a vast difference between good fellowship and prodigality. The man who squanders his money in order to win the applause of others, ends by earning their contempt.

A Few Facts.

Knock and the world knocks with you.
Boost and you boost alone,
When you roast good and loud,
You will find that the crowd
Has a hammer as big as your own.

Buy, the gang is with you,
Renege, and the game is all off,
For the lad with the thirst,
Will see you first,
If you don't proceed to cough.

Be rich and the push will praise you,
Be poor and they'll pass the ice,
You're a warm young guy,
When you start to buy,
You're a slob when you haven't the price.

Be flush and your friends are many,
Go broke and they say "Ta-ta,"
While your bank acount burns,
You will get great returns,
When it's out, you will get the "Ha-Ha."

Be gay and the mob will cheer you,
They'll shout while your wealth endures,
Show a tearful lamp—
And you'll see them tramp—
And it's back to the woods for yours.

There's always a bunch to boost you,
While at your money they glance,
But you'll find them all gone,
On that cold grey dawn,
When the fringe shows upon your pants.

UP TO THE MINUTE NEWS SIFTINGS

MANUFACTURING COMPANY OPERATES MODEL WELFARE DEPARTMENT.

The Kirk-Latty Manufacturing Company of Cleveland, Ohio, has a plant which covers approximately six and a half acres of land, the actual manufacturing floor space being a little over four and a quarter acres. It has added about 100,000 square feet of floor space within the last two years, all of which is of the latest fireproof construction. The old part of the factory has been entirely remodeled, bringing it up to date in every way. The factory throughout is lighted, ventilated, and heated by means of the latest achievements along these lines.

In addition to the welfare work mentioned in the foregoing, The Kirk-Latty Manufacturing Company has recently covered each employee with life insurance. Everyone is insured according to the position he occupies, the minimum policy being for $1,000 and the maximum for $2,500. A few days ago the Company's president, S. D. Latty, was called upon by a committee of the office and factory employees and presented with a steel engraved testimonial expressing the sentiment of all employees. This testimonial is worded as follows:

"To Mr. Samuel D. Latty, President of The Kirk-Latty Manufacturing Company, May, Nineteen Hundred and Nineteen. Whereas: Mr. Samuel D. Latty has so thoughtfully and most generously considered us by giving to each employee of The Kirk-Latty Manufacturing Company a life insurance policy, therefore be it resolved that we, the employees of the Company, do extend our most grateful appreciation and sincere thanks to Our Beloved President."

General View of the Plant of Kirk-Latty Manufacturing Company, Cleveland, Ohio.

The Company has rearranged the locations of the manufacturing departments so that its production is on a progressing system—raw materials entered at one end of the plant, and finished products leaving at the other. The latest design conveying systems have been installed for the handling of finished and semi-finished products throughout the plant. The first thought in the mind of the Company is to provide a pleasant and safe place for its employees in which to work. All the machinery is equipped with the latest safety appliances, thus eliminating all danger of accidents.

The fire hazard has been reduced to a minimum by installing the latest fire equipment. New machines have been added, all of the latest type and design and this has increased the Company's output considerably. A dining room has just been established and arrangements have been completed for the installation of individual lockers for each employee. These lockers will be located in one large room which will also be equipped with the necessary washing-up facilities.

Mr. Latty was gratified with this acknowledgment of his action and in expressing his appreciation said that he was, indeed, pleased to see among members of the committee faces that had been connected with the Company for a period of twenty-five years and hoped that the spirit expressed in the testimonial would continue in the factory. He said it was his first thought and effort to provide a working place for his employees and to follow a policy dealing with the welfare of his employees that will promote health and happiness among them.

"From delivery boy to merchant prince" will never be written of the fellow who is satisfied to let well enough alone.

THE WEEK'S HARDWARE RECORD

Of Interest to Manufacturer, Jobber and Retailer

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 50 to 55 inclusive.

OHIO HARDWARE INSURANCE COMPANY HOLDS QUARTERLY MEETING.

The second quarterly meeting of the Ohio Hardware Mutual Insurance Company was held June 18, 1919, at Coshocton, Ohio, in the office of George M. Gray, member of the Executive Committee of the National Retail Hardware Association, who is a director of the company. In addition to Mr. Gray, four other directors were in attendance, namely, J. P. Duffy of Greenville, H. C. Wiseman of Springfield, D. C. Thompson of Cambridge, and P. G. Werts of Cleveland.

Plans were formulated and discussed for the extension of the Ohio Hardware Mutual Insurance Company's business into other states. A review of the work done during the past year disclosed big developments in the scope of the company's activities, showing that it is now carrying seven million dollars insurance for Ohio hardware dealers.

CHICAGO HARDWARE DEALERS REDUCE STORE WORKING HOURS.

Through an announcement in all the newspapers of the city, Chicago's leading hardware merchants having stores in the central business section known as "The Loop," have notified the public that they have reduced the working hours of their employees and that hereafter the stores will open at 8 o'clock in the morning and close at 5:30 in the evening. The firms taking this progressive step are: Bullard and Gormley Company, James G. Barry Company, Kraut and Dohnal, J. H. Clark Hardware Company, Cobb, Whyte and Laemmer Company, Stebbins Hardware Company, Wallbrunn Kling Company, Hodge and Homer Company, and Thomas Hardware and Cutlery Company.

As an example of collective advertising for a specific purpose, the announcement is a lesson in cooperation worthy the emulation of other dealers. A note at the bottom of the advertisement states: "All of the above named firms have positions open for experienced retail hardware men, good salaries, pleasant surroundings, congenial work and short hours."

ACCEPTS POST OF VICE-PRESIDENT.

For many years as General Manager of the Small Tools department of Pratt and Whitney Company, Hartford, Connecticut, F. G. Echols acquired a knowledge of that branch of hardware which makes his services especially desirable. His executive ability, coupled with practical experience, have attracted much notice in the trade. Inducements have been offered him from several quarters to join the staff of larger companies. He has finally hearkened to the call of opportunity by accepting the position of vice-president of the Greenfield Tap and Die Corporation, Greenfield, Massachusetts.

CHICAGO HARDWARE RETAILERS PLAN ANNUAL SUMMER OUTING.

Considerable progress has been made in working out plans for the annual picnic of the Chicago Retail Hardware Association. Arrangements have been completed for holding the outing July 16th in St. Paul's Park at Morton Grove, fourteen miles from Chicago, on the line of the Chicago, Milwaukee and St. Paul Railroad.

STARTS MAKING BENCH CLAMP.

The Falls Tool and Machine Company of Cuyahoga Falls, Ohio, has started a factory for the manufacture of Moore's bench clamp, the patents for which are controlled by the company. The device is a combined carpenter's bench clamp and stop. The side jaw works on a swivel, and by inserting a board with a gentle shove it immediately clamps the board.

ISSUES DIRECTORY OF JOBBERS.

The 1919 edition of the American Hardware Jobbers' Directory and Trade Name Index is now available for distribution. It gaves a list of hardware jobbers of the United States and Canada, with names of over 1,000 buyers, 70 different classifications indicating the lines of goods sold, capital stock, territory covered, percent of business wholesale; also number of traveling men, and if catalog is issued. In the Directory are 256 heavy hardware jobbers; 720 South American hardware importers; 604 department stores who handle hardware and house furnishing goods; 587 New York exporters, who export hardware; 350 automobile accessory jobbers; and over 7,000 trade names of hardware articles, alphabetically arranged.

The book is paper bound and contains 244 pages. All these different departments are separated and thoroughly indexed, making the book a ready reference volume. It is published by Edward G. Baltz, 21 Park Row, New York City.

The more a merchant advertises, just that much more business will he eventually get. When once you get started, do not stop, because that is what proves so costly to the merchant in the long run.

National Retail Hardware Association Convention Affirms Need of Liberal Business Policy.

Coming from forty states of the Union, the delegates to the Twentieth Annual Convention of the National Retail Hardware Association at Pittsburgh, Pennsylvania, June 23, 24, 25, and 26, 1919, represented not only the prevailing spirit of the trade but the dominant thought of American merchants in every section of the country. Their membership in the organization stamps them as leaders in their communities. Their many points of contact with men in other lines of business keep them from becoming narrow or provincial in their views of social and industrial themes. The necessity of avoiding controversial topics in their dealings with customers of every shade of opinion prevents the development in them of a partisanship which is intolerant of any judgment but its own.

J. M. Campbell, Newly Elected President National Retail Hardware Association.

When, therefore, these delegates met in the William Penn Hotel at Pittsburgh, it was not for the purpose of ratifying plans prepared in advance by an intriguing minority, but with the intention of working out a program of closer cooperation through free discussion and a reciprocity of ideas and experiences. Recognizing their relationship to all the people, both as citizens and as merchants, they conducted the deliberations of the Convention with attention to public interests as well as to affairs of their Association. Thus it followed that the assembly affirmed the wisdom of a broad and liberal business policy in matters affecting the general welfare of the nation.

Monday, June 23, 1919.

Preparatory to the formal opening of the Convention, two meetings of the Executive Committee were held Monday, June 23, 1919, one in the morning at 10 o'clock, and the other in the afternoon at 2 o'clock. At 3 p. m. the same day, the Executive Committee had a joint session with the presidents and secretaries of the several state organizations which are affiliated with the National Retail Hardware Association. The personnel of the Committee includes F. R. Boyce of Wellsville, New York; E. M. Healey of Dubuque, Iowa; Matthias Ludlow of Newark, New Jersey; C. H. Casey of Jordan, Minnesota; Hamp Williams of Hot Springs, Arkansas; F. E. Strong of Battle Creek, Michigan; and George M. Gray of Coshocton, Ohio.

The principal subject which engaged their time Monday afternoon was the matter of the new constitution and by-laws to be presented for the action of the Convention. Inasmuch as the growth of the Association during twenty years has been accompanied by a widening of its services to the constituent organizations, it was clearly perceived by its officers that the Association has evolved far beyond the limitations of the present rules and regulations governing its activities.

Tuesday, June 24, 1919.

The Convention was set in motion Tuesday morning, June 24, 1919, at 10 o'clock with the singing of "America" by the assembled delegates. W. P. Bogardus, past-president of the National Association, then made an invocation, after which the national and state officers and delegates were introduced to one another as members of the Convention.

An encouraging talk on optimism was delivered by Roy F. Soule of New York City. He indicated some of the numerous reasons for confidence in the continued prosperity of our country and urged the hardware dealers to take full advantage of their opportunities.

William Mather Lewis of the Savings Division, Treasury Department, Washington, D. C., spoke on "Thrift and the Retail Merchant." He showed that it is to the interest of the retailer to encourage his customers in the purchase of War Savings Stamps. Thrift people buy only the best commodities because they have learned the lesson of values. By avoiding unnecessary expenditures, they accumulate money with which to build homes and purchase things which they actually need. Thus a steady and reliable trade is developed in which credit losses are reduced to an almost imperceptible minimum.

Tuesday's morning session terminated with the appointment of Convention Committees to consider the subjects designated in their titles and to make suggestions and reports later on to the general assembly.

The afternoon session began at 2 o'clock with a roll call of the delegates. Whereupon National President M. D. Hussie delivered his annual address. The approval with which it was received by the Convention gave evidence that he voiced not only his individual

views of the subjects upon which he spoke but also the consensus of the members of the National Retail Hardware Association. The complete text of his address is as follows:

Address of President M. D. Hussie to the Twentieth Annual Convention of National Retail Hardware Association, Pittsburgh, Pennsylvania, June 24, 1919.

"The time that has elapsed between the last convention of the National Retail Hardware Association and this, our twentieth annual meeting, has indeed been fraught with big events. Almost equally divided between war and peace, the year will always stand as one of the periods in the world's history.

"When we assembled last June, at Cedar Point, Ohio, our country was locked in a death grapple with a formidable foe, a foe who, while professing peace and good will, had been for years preparing to take advantage of the world's unpreparedness and make of even this great country of ours a tribute-paying colony to the German Middle Europe.

"Realizing as we did the enormity of our task when it was almost too late, it is no wonder that anxiety and the somber shadow of war should affect our deliberations, or that each and every member of our Association should feel and express the thought that the only reason for calling the convention at all was to assist our Government in every possible way in winning the war.

Service to the Government.

"This thought permeated all our deliberations: it spoke in the words of the retiring president, Mr. Gamble, and it sat at the board with the executive committee when that body assembled. It dominated the active officers as nothing else during the first six months of the present fiscal year to the extent of concentrating a great deal of effort along the line of giving greatest national service.

"A detailed account of our activities in this respect will be contained in other reports. Suffice it to say that we were in shape to render material assistance to the Government when the signing of the armistice removed the necessity and consequently the incentive for any further effort along this line.

"When something like six months ago the last gun was fired on the western battle front and General Foch spoke his world famous address to the German armistice envoys, 'Please sign on the dotted line at the bottom,' everyone in the United States immediately threw all the waste paper and newspapers they could lay their hands on out of the office windows into the streets in token of their rejoicing, and their belief that everything was over, as far as the war was concerned, but the formality of signing the peace treaty.

Vexatious Delays in Signing Peace Treaty.

"That was six months ago, and the supposedly simple formality has proved a stupendous and dangerous operation. The several nations interested have consumed the time like horse jockeys at a race, each seemingly trying for a better position than his fellows, while the people impatiently wait and swarm like angry bees, stirred up by self-seeking and anarchistic agitators. The peace treaty is not yet signed, although it will undoubtedly be signed in the next few days.

"Just what effect this condition has had on business, what effect it is having on business, and how we can best stimulate and safeguard business during the days before us, should be the study of every business man, be he manufacturer, jobber or retailer.

Everyone Has Duty to Perform.

"Be he ever so big in the business world, or ever so small, this is a duty confronting him which he owes to himself, to the particular craft he represents and to his country, for I believe that the business men of this country have it within their power to prove the salvation of the country.

"It is a fundamental truth that business of whatever kind can not long exist unless it delivers some specific service to the public. The manufacturer, converting basic raw material into useful or desirable articles, has taken the first step, but unless he can succeed in getting his product into the hands of the largest possible number of ultimate consumers, at the lowest possible cost, he is not fulfilling his mission and can not hope long to exist. It is up to the manufacturer, therefore, to seek means toward this end, and call to his assistance other agencies.

"Experience has demonstrated that the best method

M. D. Hussie, Retiring President National Retail Hardware Association.

of distribution consists of having stocks warehoused in various convenient centers to be drawn on in turn by smaller and more varied and diversified stocks, located in every town, hamlet and village in the country.

The Triumvirate of Business.

"The manufacturer has thus linked up with himself the jobber and retailer, and this triumvirate constitutes the three legged stool of business. Upon this three legged stool, figuratively speaking, rests the ultimate consumer, and it is our duty so to stabilize our business that the said ultimate consumer will not be made seasick by the uneasy motions of his base of support.

"I can not emphasize too strongly at this time the importance of closer cooperation between the manufacturers, jobbers, and retailers of hardware. Each of these branches of the industry has large and well organized associations; each has careful and capable offi-

cers, and very much to the point I desire to make, all have problems in common, capable of solution through mutual understanding, and in no other way.

"I do not mean by this any collusion to fix price or even to discuss price; but if we hope to remain the medium through which the public elect to be served the entire trade must adapt itself to the requirements of the public and not sit stubbornly behind the bulwark of its special business or organization expecting the public to continue to take its requirements in our capsules.

"With this thought in mind the officers of this Association have invited to be with us at this, our twentieth Annual Convention, representatives from the American Hardware Manufacturers' Association, the National Hardware Association and the Southern Jobbers' Association. They are most cordially welcome and we hope they will not only attend our deliberations but will feel free to give us the benefit of their counsel and advice.

Proud of the Title of Merchant.

"We have been called a nation of traders. Sometimes this term has been applied to us slightingly by a certain class of unthinking people, but for my part I am proud of the title of merchant. Business is the arterial system of this country. What the arteries are to the human system, business and merchandising are to the prosperity and well-being of the population of these United States.

"Agitators and loud-mouthed disturbers sometimes call us drones and nonproducers, but just stop and think what would result were business to cease for even one week. Starvation would be at the door of almost everyone and quickly corpses would lie like carrion in the streets. Russia is today a very good example of the result of attacking and suppressing merchandising and trade.

Necessity for the Middleman.

"What, for instance, would or could the farmer or planter do with his produce were it not for the middleman, the merchant who scatters it broadcast to the people, who classifies, packs and ships it, who warehouses it, and converts the raw material produced by him (frequently in a most crude and unsalable state) into marketable and desirable merchandise.

"He surely could not perform all these duties himself. He not only would not have the time, but he would not have the ability to undertake the task. And yet I have heard farmers, who were seemingly intelligent men, rail against middlemen, calling them harsh names, the mildest being drone and parasite.

"You have only to look about you for evidence that there is a movement on foot in the agricultural districts, fostered and promoted by ruthless self seekers to further their own ends, and who for a few dirty dollars would be willing to make of this country another Russia.

"Such a movement is gaining considerable headway in some states for the elimination of the merchant class and the stimulation of the direct-to-user idea. Woe to any country so blind as to kill off and suppress legitimate trade and traffic. Therefore, gentlemen, it seems to me that our duty is plain. We must take part in the reconstruction of the trade of the world particularly as it affects us here in this country.

Deal With Problems of Today.

"The past is behind us. The present and the future are what we must deal with now. What, therefore, are the important questions confronting us as American business men, which we must meet and solve if we hope to continue in business?

"Let us deal with the most pressing and urgent questions first, and I will indicate them in their relative importance as I see them.

"Some of the important questions that are pressing upon business, and through business on the country at large, are Price, Labor, Transportation, and Restrictive Legislation.

"The time is too limited to take up and study all of these questions as they should be studied, but let us briefly analyze the bearing they have, severally and collectively, on the prosperity and contentment of the country.

The Question of Prices.

"Let us take the question of Price first, to the jobber, to the retailer, and finally to the ultimate consumer.

"During the past six months I have attended a number of notable business meetings and almost invariably one of the subjects up for discussion was how to make business resume its normal stride. In other words, how to hot bed the buying public.

"I claim that the question of the resumption of business is to a great extent psychological. The public, the ultimate consumers—which means you and your brother and your wife and your servant—have during the past year or more been educated as never before in the necessity of—not thrift, although that has been the word used, but—*not buying*. We hardware merchants were instructed to ask every customer who desired to purchase a hammer or a saw to try and do without hammer or saw.

"The daily papers, the general periodicals and trade press teemed with articles on every phase of economical living. The housewife was told how to make bread without flour; how to take two turnips and a quart of water and turn out mock mince pie that could not be told from the genuine until it was eaten; how to make indestructible tripe out of old inner tubes; how to take the vest of her husband's cast off suit and revamp the pants so they would be good for another spell of sitting around. In short, the entire practice and scheme of business as done in America was reversed.

"At the same time the price of everything went higher than the famous kite of the celebrated Gil de Roy. Many things took this flight on account of the war demand, but you know and I know that a great many other items went up out of sympathy, so to speak.

"Now, please remember that what you know and I know the public know, and there are two things that must happen before the business of buying is resumed with confidence by the public.

"The first is that the mind of the public, which is your mind and my mind multiplied more than a million times, must be convinced that the necessity for not buying is over. And I believe that if I should ask any of you right now, 'Is this necessity over?'

'Is the war over?' you would answer, 'I do not know.' So much for the psychology of the situation.

Abnormal Prices Must Be Revised.

"The next change that must take place is that the price of merchandise must be stabilized by a revision downward. Abnormally high profits and consequent high prices must be reduced, and to do this all the channels of production and distribution must, if necessary, stand a loss.

"I have listened to discussions between manufacturers and jobbers on this very subject, and most of them reminded me of the problem of what will happen when an irresistible force meets an immovable object. Neither is desirous of taking the loss, and for that matter, I do not much blame them. I don't want to take a loss either.

"But we might just as well look this thing in the face and meet it in the only way it can be met. That is by calling on some of the war profits to balance the loss absolutely necessary now. Only in this way, in my opinion, can a panic be averted and business placed on a normal even keel.

The Problem of Labor.

"The next important question is the one of Labor. Manufacturers in various lines tell us that the labor cost of merchandise varies between 60 per cent and 85 per cent. They say that labor can not be tampered with and that as a consequence no changes can be made in prices.

"I grant you that labor can not with justice be asked to work for less than it costs to live, so that the cost of living must come down first, and the loss consequent on the revision downward must be taken by the manufacturers, the jobbers and the retailers. But, on the other hand, labor must realize that there are others, who in fact constitute about 80 per cent of the population, whose right to fair treatment is as imperative as theirs. I quote from an address of Mr. Harry Wheeler, president of National Chamber of Commerce, on this subject:

"'We can not expect the problems of labor and capital to resolve themselves into a case where the lion and lamb will lie down together. But the lion and the lamb must recognize the fact that the pasture in which they are browsing is one in which others browse also, and they must not allow their differences to interfere with those others to such an extent as to make that pasture an unsafe place to live in.'

"One of the greatest employers of labor in the United States is Mr. John D. Rockefeller, Jr. We have all heard, and have sometimes repeated, a great deal of adverse criticism of large employers, and particularly of the Rockefellers, father and son. The names of Standard Oil and Rockefeller have come to be linked in the minds of many with remorseless grinding of labor. At least that is the way I always have had them fixed in my mind, though I know nothing personally of the methods of either. But last winter I listened to an address on the subject of labor by Mr. John D. Rockefeller, Jr., and the principles advanced by that young man were worthy to be adopted by both capital and labor.

"'Labor and capital,' he says, 'are partners. Their interests are common, and neither can obtain the fullest measure of prosperity at the expense of the other. Every man is entitled to an opportunity to earn a living, to fair wages, to reasonable hours and proper working conditions; to a decent home, to the opportunity to play, to learn, to worship, and to live as well as to toil; and the responsibility rests as heavily upon industry as upon Government and society to see these conditions and opportunities prevail.'

The Menace of Radicalism.

"But labor has had fastened upon it and twined around it in every land, that monstrous evil which, like the plague of influenza, came out of Russia, and which threatens even the manly and intelligent labor of our own country, namely, Bolshevism.

"It is your duty, if you wish to preserve a sane and civilized government, nay even the roof over the heads of your families, to combat this infamous and insane monster with every energy and weapon at your disposal. It has no place in our free country and should not be tolerated where Americans dwell. Its very names and terms are foreign to our language and its doctrines repugnant to any but a moral pervert 'Bolsheviki,' 'Soviet,' 'Proletariat,' and 'Bourgeoisie,' vague, foreign sounding words, all of them, but when translated into plain United States spell 'Vermin, No Baths, Free Love, Destruction of Property, Murder, Famine and Loot.'

C. T. Woodward, Member of Advisory Board, National Retail Hardware Association.

"This is no shadowy and distant danger to which I call your attention, which you can perhaps avoid by looking the other way, or that you can leave for some one in the future to reckon with. It is here present, seemingly in the very air we breathe, and it is your task to grapple with it and kill it, or it will kill you.

Is Not a Pessimist.

"Now, don't misunderstand me and rate me as a calamity howler or a pessimist. I believe that we live in the best and most favored country and at the threshold of one of the greatest eras of prosperity that the world has ever known, but in order to de-

velop that prosperity without demoralizing climax due us on account of the abnormal conditions attending our participation in the war, we must meet our problems like sane, reasonable, business men.

"The next problem confronting us at this time is the one of transportation. No one needs to tell you shippers what you are contending with every day of your business lives in the matter of transportation of freight.

"Exorbitant charges, exasperating delays, indifferent service; in some instances downright discourtesy; and on top of all this the pleasant fact staring you in the face that the railroads, as per the last report of the director general, are carrying a half billion dollar deficit for the first three months of this year's operations, which deficit must be met by more taxes, which you will sweat to pay.

Suggests the Remedy.

"What is the remedy? you ask. My belief is that we should urge our representatives in Washington with all the power behind our 15,000 membership, and the five times that 15,000 votes we can control, to get the railroads back into private ownership—under government supervision if you will—just as soon as possible.

"In corroboration of the soundness of this opinion is the President's message to Congress when it convened last month. He distinctly advocates the return to the owners, of not only the railroads, but the telephone and telegraph lines as well. It is a self-evident fact that the affairs of these corporations can not continue for long as they have been doing. With a deficit running into the billions and a daily cost to the public of from 35 per cent to 40 per cent increase in freight and passenger rates, with indifferent service, particularly in the matter of freight transportation, it is not to be expected that even the patient and long suffering American public will stand for it much longer.

"This is a vital question, gentlemen, as I see it. The railroads must be made to pay dividends, they must be competitive, and they must be encouraged to expand and extend, or decay will have not only them but us. There is no standing still. Longfellow expresses the idea beautifully when he says:

"'Nothing that is can pause or stay,
The moon will wax, the moon will wane,
The mists and clouds will turn to rain,
The rain to mists, and clouds again,
Tomorrow be today.'

"To use a beautiful thought to illustrate a prosaic subject may sound like sacrilege, but business is just like that. We must keep it moving; there can be no stoppage.

Restrictive Legislation.

"And now to call your attention to the next business man's problem, that of restrictive legislation. Far be it from me to find fault with or rail at the laws of my country, and I urge each and every one to be careful and painstaking in obeying the laws as they exist, no matter whether you think them just or not.

"But my respect for the law and your respect for the law need not prevent us from earnestly and faithfully using every effort to defeat the passage of unjust or discriminating laws and to bring up for revocation or revision such laws as are now on the statutes, but which have proven unjust, unfair, or discriminating. The reason I urge this upon your attention is that we business men have not heretofore taken enough interest in the lawmaking that has been going on in our states and at Washington. Why should there not be a few more business men in our legislatures and not so many farmers and lawyers? The farmer is represented; lawyers are there by the score; labor is present; but business men seem to have been running in circles.

Coöperate for Sound Legislation.

"We must, in justice to ourselves and to our business, get together on this important question of representation in our law-making bodies, or if we don't we only have ourselves to blame for laws designed seemingly for the sole purpose of penalizing business. I say it with all respect for the legal fraternity, amongst whom I have a great number of very good friends, but very few lawyers and judges have much sympathy for business. Some of the interpretations of existing laws would lead one to believe that they looked upon all business men as dishonest and to be dealt with accordingly. I am willing to admit that we may have in our ranks a certain percentage of dishonest individuals, but that we are as a class to be watched more closely than doctors or preachers, or even the lawyers themselves, I most emphatically deny.

Long Period of Transition.

"Now, my friends, I desire to call your attention to a few questions that will be up before you for consideration, dealing with the management and future welfare of the Association. For our Association the past year has been practically the culmination of a long period of transition and preparation; transition from the strengthening and preparatory stage of our existence; preparation for the larger field of usefulness toward which all our previous efforts have tended.

"Heretofore we have been building; strengthening our organization in membership and unity of purpose; perfecting our headquarters machinery and gradually learning what we were called upon to do and what was required to do it, for the betterment not only of the retail hardware trade, but the entire hardware industry.

"To infer that we have no more to learn and no further preparation to make would be the height of presumptuous folly, but I believe we have enough preparation and enough knowledge of requirements to enable the National Retail Hardware Association to be, what it was the evident intention of its organization that it should be, the monitor and guide of the retail hardware men of the United States.

"The committee on constitution and by-laws will submit for your consideration and, if you so elect, ratification, certain changes in our constitution, which it is the belief of the executive committee will better coordinate and intensify the work of State and National associations and make their membership service more effective.

"That there is need for a proper understanding

between the State associations and the National I believe all will admit. Lack of this coordination of effort has sometimes placed the National and certain State organizations in diametrically opposite positions on important public questions.

"For instance, some of the State associations endorse and vouch for one cent letter postage, while in recent years the National has taken no positive stand on this question, although it has been given considerable study. It is a moot question whether one cent letter postage is all that its sponsors say it is, and until they are more fully convinced on the question, the National office has thought it wise neither to endorse nor condemn it.

Question of Metric System.

"Quite recently there has been considerable literature sent broadcast asking the endorsement by State associations of the movement to change the nation's weighing and measuring methods by adopting the meter-liter-gram system. Just who is responsible for this I do not know, but the National has not endorsed the movement as yet, and prefers to wait before doing so until it has been demonstrated that it will be a good thing for business, foreign and domestic. I understand, however, that some of our State associations have endorsed this movement. There is nothing wrong in this endorsement in itself inasmuch as the several associations are, as you might say, free agents and strictly within their rights in doing so, but it would be more dignified and perhaps better in the end if questions of this nature were submitted to the National Association for study before being freely endorsed.

"A section in the amended constitution and by-laws which will be submitted to you, is particularly designed to cover such matters by defining the obligations of the State associations to the National, which is important and necessary for the proper coordination of the work of both. The section dealing with the number and the duties of the officers should have your careful thought and, if you deem it wise, your ratification. This clause deals with the formation of an executive committee from the board of governors and will enable the president and secretary to have at their call a consulting body of thoughtful men without the necessity and expense of assembling the entire board of governors.

Combine Office of Secretary and Treasurer.

"Another change to be desired is the combination of the offices of secretary and treasurer. The present method is not only cumbersome, but at times expensive inasmuch as it quite often occurs that payments are delayed and discounts on supplies lost or taken after time, the fault of no one, but solely because it is impossible for a voucher to go the rounds necessary for all the signatures in time to take advantage of the cash discount.

"The question of the removal of the headquarters from Argos has been given serious thought by the officers during the past year, and it is the general belief that this move should be eventually accomplished. I recommend, however, that you take no action on this matter at this time, rather leaving it in the hands of the board of directors to work out with the least possible injury to the association and its interests. During the year and since our last annual convention several changes have taken place at the National office. Beginning with the resignation of former secretary Corey, his election to the office of treasurer and later appointment as advisory member of the executive committee, followed in November of last year by his death, came the necessity of appointing a successor to Mr. Corey as treasurer. Fortunately, Mr. Milo Thomas was willing to assume the duties of the office, having, as you know, been our treasurer the preceding year.

"Then came the resignation of Mr. Sheely as auditor, an office which he had filled for years in a most satisfactory manner, followed a few months later by the resignation of Mr. Towne as editor of the National Hardware Bulletin.

"The office of auditor was taken over by one of the bright and capable young women in the office, Miss Grayce Finley, who is doing the work in a most satisfactory manner. The editorship is being handled

D. Fletcher Barber, Member of Advisory Board, National Retail Hardware Association.

for the present by the assistant editor, Mr. Glenden E. Hackney, under the direction of Mr. Sheets, pending the selection of a successor to Mr. Towne.

Loss of Mr. Corey.

"In the death of Mr. Corey the Association met with a severe loss and his passing on has created a vacancy impossible to fill. His genial and magnetic personality was a most potent factor in the upbuilding of our Association. In fact, he was a national character and was recognized as such by all branches of the trade. He was always the big brother so to speak of every hardware man. Our troubles were his own.

"Try as I will I can not stifle the feeling of personal loss, as I look in vain for his cheery smile here today. It is my hope that his memory and counsels will long remain with us as a guide in the upbuilding of this, the work of his lifetime, the National Retail Hardware Association.

"I feel that I can not close this, the report of my

stewardship, without paying tribute to my fellow officers who gave so freely of their time during my term of office as president. These men without exception responded to every call upon their time most generously. I know this response came often in their busiest seasons and when they could ill afford to leave their own affairs, but almost to a man I could rely on them.

"It is difficult to particularize where there was so much excellent and willing service, but Mr. Campbell, Mr. Woodward, Mr. Gamble, Mr. Thomas and Mr. Strong stand out as particularly cheerful and self-sacrificing workers, and I desire to take this opportunity of publicly thanking them.

Praises Work of Secretary.

"The work of Mr. Herbert P. Sheets during the first year as secretary has been particularly trying, but he met every problem with skill and far-sighted vision, and the Association has not only prospered under his management, but if allowed to proceed along the lines proposed by him will in a few short years surpass our most sanguine hopes as a power for good in the retail hardware trade. And in conclusion, I wish to assure you that I appreciate more than I perhaps can express the honor you have conferred upon me and my state by placing me in the office of president during the past year, and when, at the close of this convention, I resign the gavel to my successor I hope with your assistance to have rounded out (not the best year and convention, for that would be well nigh impossible), but one of the best years and one of the best conventions we have ever had."

At the close of President Hussie's sane and thoughtful speech came the annual report of Herbert P. Sheets as Secretary of the National Retail Hardware Association. The salient parts of his report are herewith reproduced and commended to the careful study of our readers:

Report of Secretary Herbert P. Sheets to the Twentieth Annual Convention of the National Retail Hardware Association, Pittsburgh, Pennsylvania, June 24, 1919.

"To attempt to itemize all the activities of the National Association during the past year would make a document too voluminous for continued interest; so my report will be in the nature of a summary of progress, leaving details for the consideration of the executive committee. Though there has not been a complete fulfillment of all the hopes I entertained at the beginning of the year, I believe a careful study of the entire situation will show that our progress has been as great as could be reasonably expected in all the circumstances.

"Succeeding Mr. Corey, who had so faithfully and efficiently served the Association for eighteen years, and to whose initiative and energy association progress was so largely due, it was with the earnest hope and full expectation that my increased responsibilities would be measurably lightened by his continued counsel and advice. And that this was the desire of the entire membership and the plan of the executive committee was shown by his election as treasurer and later appointment as adviser to the executive committee. Yet such are life's uncertainties that just when we were beginning to get properly organized, just when Mr. Corey was prepared to enjoy to the full his release from the burdens he had so long carried, death closed a career that will long live in the memory of all those affiliated with the hardware industry.

Worked Seven Years with M. L. Corey.

"For nearly seven years I had the pleasure of working closely with Mr. Corey, and I know as only those enjoying a similar privilege might know, with what unselfish devotion he threw himself into association activities, and with what keen understanding, broad sympathy and conservative judgment he assisted in the solution of retailers' problems and the advancement of their interests. Well may we all pay highest tribute to Mr. Corey's memory. He was your friend, my friend, the warm friend of us all.

"Following Mr. Corey's death came also the loss to the National Association of Mr. Gilbert F. Sheely, whose thirteen years of service was second only to that of Mr. Corey, he being chosen as Mr. Corey's logical successor as secretary of the Indiana Association. Still later came the resignation of Mr. Arthur E. Towne, for nine years editor of the National Hardware Bulletin; leaving Mr. Riner and myself as the only remaining members of the headquarters staff as it was less than eight years ago.

"All these changes in personnel within such a brief interval made our chief problem one of reorganization rather than of directly forging ahead, which in any event would have been hindered by war conditions. Notwithstanding all these handicaps, the executive committee feels that the organization has made excellent progress, that the members have enjoyed enlarged service facilities, and that we are now at the threshold of a new era of Association activity.

Activities of President Hussie.

"Throughout the year President Hussie kept in constant touch with every branch of the work, having made six visits to the Argos office, with five additional conferences and committee meetings with the secretary. He also made one visit to Washington to confer with members of the War Industries Board, attended two meetings of the National Chamber of Commerce, at Atlantic City and St. Louis, the conventions of the American Hardware Manufacturers' Association and the National and Southern Hardware Jobbers' Associations, besides a number of state gatherings.

Progress of the Association.

"Since our Cedar Point convention the National family has been enlarged by the affiliation of Oregon and the organization of the Virginia Retail Hardware Association, at Richmond, May 29th and 30th, by one of the most constructive gatherings I have ever attended. I am sure every delegate here present joins the National officers in extending a warm welcome to the members of the Virginia Association as well as to the Oregon dealers who have recently joined forces with us.

"With possibly minor exceptions, the state associations have all shown material progress in membership interest and numbers. This has naturally been reflected in the National Association, latest reports from state secretaries giving a total membership of approximately 15,500, and showing a goodly gain for the year. With

many state associations already including most of the best merchants of their respective territories, it is apparent that in these sections the limits of desirable membership are fast approaching; but neither state nor National officers will be fully satisfied until our rolls approximate 100 per cent of possibilities.

Tabulates Services to Members.

"During the year our first serious effort was made to assemble and tabulate all the varied activities of state and National associations and their multiplied forms of service to members. Many weeks were required to gather all the essential facts and put them in logical order for the greater information of the membership and the use of association workers. That something of this kind was greatly needed was proved by the immediate orders from secretaries which required the printing of 40,000 copies. These booklets are being used not only to give members a better understanding of all the forms of association service at their command, but as a strong feature in membership campaigns.

Increase of Dues Is Necessary.

"In developing their plans for extended service a number of states have found increased membership dues necessary. Such increases have been cheerfully voted by the conventions whenever proposed, because business men do not expect something for nothing. They are willing to pay a reasonable amount for an association service that is worth while. It is greatly to be regretted that association work has so long been handicapped through the lack of proper financing, because the association has been too cheaply sold. Maximum organization work covering such multiplied forms of service as we have undertaken cannot be accomplished with membership dues of $3 or $4, or even $5 or $6; and our younger members, Louisiana and Virginia, are to be congratulated upon their wisdom in fixing dues at $10 and $12, respectively.

Members Share Prosperity.

"Notwithstanding the limitations placed upon retail selling as a result of necessary conservation during the war period, and of the hesitation which is naturally a factor of the readjustment from war to peace, members generally have had a prosperous year. Labor has been steadily employed at high wages, and the farmer's income has been the largest in agricultural history. Practically all classes have been able to buy the things they have long wanted, and sales have grown.

"All crop reports indicate that 1919 will be the most prosperous year in the history of the farmers of this country, and with prices remaining at present levels, as they doubtless will, they will have a total estimated income of approximately $24,500,000,000, or 14½ per cent greater than their income in 1918. There is every indication also that activity in all our industries will be largely increased as time goes on, with little, if any, decrease in wage levels. These are factors which, of course, have a vital bearing on the buying attitude of the public and give basis for the belief that steadily increasing business may be expected by our members.

Progressive Merchant Goes After Business.

"The progressive merchant no longer waits for customers to come to his store, as of old; he builds his business by studying conditions, anticipating the wants of the community and stimulating interest in the various forms of merchandise the need of which buyers may not yet have recognized. Just as the manufacturer must study all the processes of fabrication so must the merchant dig deeply for all the essential trade facts affecting retail distribution in his particular locality, and from his analysis of these facts, determine constructive sales policies and selling plans. This is a feature of service to which the association has given a great deal of study, and during the year many members have been assisted in planning community trade studies which invariably lead to more intensive merchandising. Plans are well in hand for the rapid extension of such work during the coming year.

Systematic Sales Training.

"Members are also realizing more and more the necessity of systematic sales training as an aid in bridging the gap between producer and consumer, not only as a means to greater efficiency and economy in

Herbert P. Sheets, Re-elected Secretary National Retail Hardware Association.

selling but as a definite service to customers. A practical study course for this purpose was tentatively outlined at our last convention, and now that war-time handicaps are gradually being removed it is our purpose to develop this idea as quickly as possible.

Greater Cooperation Needed.

"I am quite sure I express the thought of the executive committee in suggesting that the time has come when there should be a greater real cooperation between manufacturers, jobbers and retailers, not only as individuals, but through their respective organizations. While each group has problems distinctly its own, and must solve such problems as best it can, all have a very vital interest in everything relating to marketing, many of the problems of which can be effectively solved only through joint discussion and action. It seems to me material progress might be made in the solution of these general problems and the elimination of the many trade evils through such coopera-

tive action, and that a joint conference of representative members of each group might prove of very great value to all branches of the trade.

Special Service Bureau.

"The activities of the Special Service Bureau have increased and its value to the membership enlarged in the face of conditions making exceedingly difficult the gathering of accurate information on certain subjects. As rapidly as possible the necessary readjustments are being made, and it is hoped that in the comparatively near future we shall once more be equipped to give members complete and accurate information on practically all matters relating to hardware and kindred lines. There is almost no limit to which the department will not go in assisting members, so that its value to the members depends very largely upon how they take advantage of the service and ask for the information desired.

Field Service Progress.

"The field service department was started at a time when the need was great, but also when the difficulty of rapidly extending the work to its logical limits was even greater. During the year attention has been very largely given to perfecting and marketing the National Retail Hardware Association Accounting System, and splendid progress has been made. That members appreciate this service is shown by the fact that more than 1,100 have availed themselves of its advantages. The increasing problems and complexities of business have impressed retail merchants with the necessity of having accurate knowledge of all the facts of their business, and the National Retail Hardware Association Accounting System effectively records and makes these facts usable.

"It is so simple that the majority of the members adopting it have transferred their accounts without outside help, and any intelligent young man or young woman can keep the records without difficulty. Its flexibility makes it possible for members to use all or any portion of the forms as may best fit their requirements. While Mr. Miles, who is in charge of this service, has not spent so much time in the field, visiting the stores of members, as had been hoped, he has been productively occupied in other ways, and as the handling of the accounting system becomes better organized, he can devote much more of his time to field work proper.

Store Plans and Suggestions.

"Much service has been rendered to members in the way of store plans and suggestions for the convenient arrangement of stock for attractive display and easy handling; and it is the purpose that this feature of the work shall be extended as rapidly as possible, as its value to the membership is very great. From the beginning it has been recognized that it would be practically impossible for the National office working alone to extend field service to its ultimate possibilities. This must be accomplished through the broadening of the work of every state association and its full coordination with National Association activities.

"It is gratifying to report that considerable progress has been made in this direction, a number of state associations having made plans for field work extension, Wisconsin taking the lead by employing as assistant secretary a thoroughly experienced hardware man who spends the major portion of his time visiting the stores of members and giving them constructive assistance.

Auditing Department.

"From a position of relatively minor importance in the early days of the organization, the work of the auditing department has multiplied with the years until it now requires all the time of two people. It takes care of all billing and collections, transfers all funds, pays all accounts, either by voucher on the treasurer or from the office budget, and keeps all financial, membership and subscription records.

Legislative Matters.

"Practically no legislative work was done during the year, but opportunity for constructive activity in these lines will doubtless soon be with us. The recommendation of the Federal Trade Commission that Congress pass a price maintenance measure marked material progress for the cause of fair trade which the association has advocated for many years. New bills following the lines of the former Stephens-Ashurst bill and conforming to the suggestions of the Federal Trade Commission have recently been introduced in both houses of Congress, and there seems to be excellent opportunity for their passage when reconstruction legislation is out of the way.

Americanism and Sanity Needed.

"As an aftermath of war we have been brought face to face with the grave responsibilities resting upon us as a craft and as individuals, to support established institutions and authority, at a time when the very foundations of our social and business structures are threatened. No less an authority than Mr. Frank A. Vanderlip has recently drawn a gloomy picture of the industrial and social conditions in Europe, with the conclusion that America is all too likely to become involved in the bolshevik chaos which has swept over the old world.

"Not only should our organization express itself in no uncertain terms on this vital national problem, but every member must do his part for the overthrow of these vicious interests. We cannot escape individual responsibility; every man must be on his guard, constantly doing everything within his power to combat these insidious doctrines which have spread so rapidly that even the farmers of the country are becoming entangled in their meshes through such organizations as the non-partisan league, promoted and dominated by self-seeking individuals with strong I. W. W. affiliations.

Postage Propaganda.

"Much pressure has been brought upon your president and secretary to get our association's endorsement and support of the national one cent letter postage propaganda and the perpetuation of increased second class postage rates. Without attempting to speak officially for the association, it has long been your secretary's conviction that from a purely business standpoint one cent letter postage would be of very doubtful advantage to the local merchant. Its benefit would seem to be altogether with the merchant who does business wholly by mail rather than one who does business over the counter.

Progress Through Coordination.

"The future looms so large with opportunities for membership service and association progress that a detailing of the possibilities as we see them would be impracticable. It may be suggested, however, that the problem of distribution is of such vital consequence as to deserve the most careful study and analysis. And this can be successfully done, not by the individual merchant, but only through associated action.

"Modern methods of distribution will not continue merely because they have served in the past; they must hold their place through proven merit as measured by efficient and economical service of the consumer. That method will survive which best meets changing demands. Our intimate study of hardware problems as they develop in the daily routine of our members should be so extended and intensified that from an accurate knowledge of basic facts standards may be determined and adopted for the more efficient and economical distribution of merchandise, just as similar standards have been established for the greater efficiency and economy of production.

"During the past year much was done toward this greater coordination; among other things, a more regular passing of information from the National office to state secretaries, and the inauguration of monthly reports of association activities from the latter to the former, a comparative summary of all these reports, with a similar report of National activities, being then sent to all state presidents and secretaries, so that each association may know what every other state is doing, and through the adoption of successful plans and policities make its own work more effective.

"If the organization is to attain its ultimate possibilities as an institution of service, the individual member must be made to realize his responsibilities to his craft, and to the public, to the extent that he will constructively work for the progress of collective as well as personal interests. Such broadened cooperation among members can be developed only as the example is set in the closest coordination of all official factors and the clearer understanding by the officers of the oneness of their ultimate purposes.

"In all our organization work we must spur away from the lines of least resistance and with vision and energy blaze new trails for the constructive service of the membership.

"Before us opens vast opportunities for organization service, but we can hope to measure up to possibilities only as all our efforts are organized and coordinated in the fullest meaning of these terms."

Brief though adequate reports were made at the end of Secretary Herbert P. Sheets' address by Milo J. Thomas, Treasurer of the National Retail Hardware Association; E. M. Healey, chairman Auditing Committee; J. M. Campbell, chairman Bulletin Committee; J. R. Gamble, chairman Legislative Committee; C. T. Woodward, chairman Field Service Committee; and J. Charles Ross, chairman War Service Committee. A discussion of the various reports concluded the day's sessions.

Tuesday afternoon at 2:30 o'clock a reception for the ladies of the visiting delegates was given with music and refreshments in the Blue Room of the William Penn Hotel by the ladies of the Pittsburgh Retail Hardware Association and of the Pennsylvania and Atlantic Seaboard Hardware Association. In the evening a "Getting Acquainted" meeting was held in the Blue Room of the same hotel so that all the delegates and their guests might renew old friendships and form new ones.

Wednesday, June 25, 1919.

"Business Readjustment to Peace" was the opening topic of the Wednesday, June 25, 1919, morning session which was called to order at 10 o'clock. It was treated by Dr. J. T. Holdsworth, vice-president of the Bank of Pittsburgh, N. A., who considered the subject from the angle of the economist as well as from the point of view of the banker.

Short addresses on different phases of the general theme, "Association Problems," occupied the rest of the morning meeting.

A very practical and instructive speech on State Association Work was given by A. J. Strang, President Wisconsin Retail Hardware Association. Example is better than precept, according to the time-honored proverb; and President Strang confined himself to actual achievements of his organization rather than to theories as to what might be accomplished. The text of his address is as follows:

Address on "State Association Work," by A. J. Strang, President Wisconsin Retail Hardware Association, Delivered to the Convention of the National Retail Hardware Association in Pittsburgh, Pennsylvania, June 25, 1919.

"The life of an Association is service. The greater the amount of service rendered the stronger the organization will become and the more loyal and appreciative its members will be. Hardware Associations have developed the service of mutual insurance, it is true, and on this one service have built up their organizations. No one will question that mutual insurance has been a valuable binder and is the principal reason we have attained our present strength. But we have been carrying all our eggs in one basket.

Manage Association on a Business Basis.

"Some states, including Wisconsin, have come to realize the mistake they have been making. We realize that an Association should be a business organization operated on business principles and that it should be developed just as any other business should be. The Wisconsin Association is establishing itself as the hardware headquarters in that state and members are being trained to turn to it whenever they are in need of assistance of any character whatever and in carrying out this plan we are getting in almost daily, instead of annual, touch with our membership.

Extension of Service to Members.

"We have come to realize that the saving in insurance is negligible compared with other benefits that it is possible for a live Association to offer its membership and the result is that Wisconsin dealers hear very little of insurance matters from the Association organization. No one can estimate the limits to which Association activities can be developed. Almost any service that is rendered suggests some other service.

Reports to Officers.

"One of the milestones that marks our progress in the right direction is the fact that our Association

officers now know from month to month just what their organization is doing. The Wisconsin Association began sending its officers a report of Association activities in January of this year. I understand that this report plan is the suggestion of Mr. Roberts of Minnesota and that it is to be developed further through the National office so that each President and Secretary is to know each month, not only what his own Association has done, but what all others have. This plan no doubt will usher in a new era of Association activities, for certainly no one can receive these reports each month without gaining ideas that they can put into practice for the benefit of the membership.

Exchange Sheets.

One of our first developments was an Exchange Sheet. In the beginning this was used simply to list merchandise which members had for sale. If we had

J. R. Gamble, Member of Advisory Board, National Retail Hardware Association.

gone no farther the plan would have been well worth while. For instance, one of our members had a stock of $500 worth of certain loaded shells that he could not move in his community. He advertised these in the Members' Exchange and the demand exceeded his supply. Through the medium of the Association this member had been enabled to turn $500 worth of dead stock into money, without loss, and without demoralizing local conditions by cut prices. Development of this Exchange Sheet has been rapid. Our May issue required eight pages and contained many items of interest to the membership.

"Some may question whether or not their associations could afford the expense of such a sheet. It will not be an expense. I might say right here that we do not try to trade on promises with our members. We first show them what they can get and then tell them what it will cost. We have not large surplus and are not interested in accumulating one. The money in our treasury belongs to our members, we are willing to spend it on the members and we know that if it is spent wisely we will have no trouble getting additional funds if they are needed.

"The Members' Exchange is an example. In April we included a coupon with this sheet asking members if they would pay $1 a year for such a sheet. Of the large number of replies received only one said 'no' and some even sent their checks in. If we had asked the same question a year ago there would have been practically no response for the members would have had no idea whether they want such a service or not.

"A little boy, watching his father make up a bank deposit one day, said, 'Gee, Dad, you must have a lot of money.' 'Why?' asked the father. 'Well,' answered the boy, 'I see you putting it in the bank all the time and I never see you take it out.'

Example of Service to Members.

"Many Association members are like that little boy. They know the dues come in every year but they do not see where any of the money is used. Show your members that you do take money out of the bank and spend it on them. In May we spent $60 for a supply of gummed Luxury Tax labels to be distributed to our members. It might seem to be a large sum for a single item. We could have let the members buy their own labels, or work out their own plan for keeping a record of these items but the money belonged to our members and we felt that it could not be spent to a better advantage than in this way. I dare say that the Department of Internal Revenue will have less trouble in getting returns from Wisconsin dealers on these taxes than in any other state.

Anticipate the Needs of the Membership.

"One of the most important services an Association can perform is to anticipate the needs of its members. The officers should not wait for members to come to them for help, if they can obtain advance information that help will be needed.

"To illustrate my meaning, I might cite the case of the luxury tax law. Realizing that dealers would want information on the subject our Secretary secured a copy of the law. A digest of the law as it applied to the hardware trade was then made and this was submitted to the collector of internal revenue in our district. After receiving his corrections the copy was prepared for the membership so that before many of them even knew that this law applied to them they had at hand a comprehensive statement of its requirements.

"The Secretary's office then realized that the members would need some simple method of keeping a record of goods sold that were subject to tax. We got in correspondence with various sources and finally worked out a simple plan which was submitted to the members accompanied by sufficient material to put the plan into immediate practice.

"The highest aim of our Association, and its most important activity, is to study retail conditions so closely that we will be able to anticipate the requirements of the membership and be able to meet them in many cases before the dealer is even aware of his need.

Freight Audit.

"During the past three years our freight audit has collected over $2,200 in overcharges. Two hundred

and ten of our members have taken advantage of this service this year. The result is that the Association means more to those 210 members than it would without this service.

"We endeavor to make the Secretary's office the center of all Association activities and therefore we have our freight bills sent there. To make the matter still easier for the members we supply them with special tags to be used in sending these bills in. It does not cost the Association much to render this service and handle it efficiently and we feel that the results justify the activity.

Credit Bureaus.

"This year we adopted the Minnesota plan of installing Credit Bureaus and issuing a rating guide. This work naturally includes all classes of merchants. We find that retailers of all classes in Wisconsin have heard of the hardware association and have confidence in it. So far we have organized three of these bureaus. There is nothing new about the idea. It has been done by private concerns for years. It is simply an activity that an Association can perform and we feel that each new service binds the membership just a little closer to the organization.

Collection Bureaus.

"Another important activity that is being developed along with the Credit Bureau is a collection department. All of you are familiar with the ordinary type of collecting agency. We are not operating that kind. We make just as much of an effort to collect a small account as we do a large one, and our interest in an account is not determined by the amount of commission we will receive. Also, our members are certain to get any money we collect for them which is not always true of some collecting agencies.

Field Work.

"Since last November we have had a capable man in the field visiting our members. This man renders services of almost every nature. He installs accounting systems, plans store arrangement, and store fixtures, departmentizes businesses, sketches modern store fronts, holds meetings with members' sales forces, or with groups of dealers in the various towns.

Something All Others Can Do.

"None of the activities I have recounted is so unusual that it can not be done by other states, and I believe that the sooner they are inaugurated the sooner we will see a remarkable growth not only in the number of members but in their loyalty to the Associations—a matter that is of vital importance.

"I think the proof of the interest dealers take in their Association is manifested in the manner in which they pay their dues. On May first we had only 84 members out of 1,166 in Wisconsin who had not paid their 1919 dues, and on June first there were no delinquents."

Following Mr. Strang's address came a talk by George B. Sprowls, President Pennsylvania and Atlantic Seaboard Retail Hardware Association on the timely topic of "Function of State Officers."

Owing to illness, F. H. Thielman, President of the Minnesota Retail Hardware Association, was unable to be present and the subject which he was to treat, namely, "State Association Financing," was omitted from the program.

Wednesday afternoon's session was to have begun with an address on "Competition and Cooperation" by William B. Colver, Chairman Federal Trade Commission, Washington, D. C., but he did not appear. His place on the program was ably filled by H. S. Daniels, President Illinois Retail Hardware Association, who spoke on "State and National Cooperation" as it affects the relations of local and national organization. This address was scheduled for the morning session and its postponement to the afternoon meeting fully compensated for the loss of Mr. Colver's speech. Mr. Daniels spoke as follows:

Address on "State and National Cooperation," by H. S. Daniels, President Illinois Retail Hardware Association, Delivered at the Convention of the National Retail Hardware Association, Pittsburgh, Pennsylvania, June 25, 1919.

"I am proud to be a resident of the Great State of Illinois, the home of Lincoln, Grant and Logan, and bring greetings to you from the fourteen hundred hardware men affiliated within her borders. I assure you we appreciate the very great honor conferred upon one of her officers in being asked to participate in the program at this the National Convention.

"The subject that has been assigned to me is one of very great importance, and worthy of your most earnest consideration—that of State and National Relationship.

"The success of our nation has centered upon the one word, *cooperation*, and whenever the nation has hesitated or departed from the principles involved in that one word, it has suffered therefrom. It was through cooperation that our forefathers established their present form of government, perfecting the present constitution step by step, as necessity demanded. It was through cooperation that our young states have been able to withstand the onslaught of opposing nations through these many years. It was through cooperation that the allies under Foch have been crowned with victory, and the slaughter and crimes of the past few years have been relegated to the dark ages from whence they came. It was through the *lack* of cooperation that our own nation trembled on the brink of disruption and was swathed in bloodshed and strife during the trying days of '61 to '65.

Success in Business Is Due to Cooperation.

"The greatest and most successful business interests of this country today owe their success to cooperation. And it was through this knowledge that a few hardware men nineteen years ago organized the Interstate Association. At that time only seven states were represented, with an entire membership of 1,200. It experienced the same changes that many such bodies do, but gradually grew until thirty-one states are affiliated under the name of the National, with an entire membership of nearly sixteen thousand, and we are glad to extend the right hand of fellowship to the Virginia Association, which bids fair to be a mighty likely youngster.

"But with increased membership come increased responsibilities, and the question naturally arises, Are we equal to the problems that confront us? Are the means at hand adequate to bring the desired results? Have we, as an organization, secured such cooperation as will meet the demands of the times? Self-

satisfaction is the enemy of progress, and inertia the companion of decay.

Emphasizes Need of New Constitution.

"The time has arrived when the Retail Hardware Association should put off its swaddling clothes. We have a large membership, not as many as we eventually will have, but enough to tackle larger undertakings. To attempt a broader work, we must define our relationship between the affiliated state associations and the National Association. We must know definitely our obligations one to the other.

"The putting off of the youthful trappings means that the National Convention at Pittsburgh should define as far as practical without violation of any state or municipal statutes, the obligations which should be assumed between the National and affiliated associations. The activities of the National Association should be enlarged. Each, however, should be confined to a well defined sphere of activity, and each should back the other in these activities; but until the sphere of activity for each is well defined, our shooting is scattered, and not as effective. In a general way, the activities of the state organization should be confined to purely state or local matters, while the National should be concerned with problems of broader scope, all of which should be referred by the states to the National. No state association should take any action which will prejudice the interests of the National or the other affiliated organizations. Every state should be as loyal to the National Association as it expects the National to be to it, and the officers should coordinate their efforts with those of the National officers.

"Of course, it is possible for a state organization now and then to solve large problems in a somewhat limited way, but in the main, such are never really solved unless they are nationally solved. Every time a state organization oversteps the somewhat intangible line between state and National activities, and attempts to do something which should be referred to the National for action, the interests of the organization as a whole are prejudiced, because those on the other side of the proposition, whatever it may be, will see a lack of unity in the organization, and lack of unity is always a sign of weakness.

Asks Some Important Questions.

"Let us ask ourselves a few questions. The echo of these questions startles us, and for the Pittsburgh Convention not to answer them definitely and positively would be a step backward by the best retail organization ever instituted.

"Under the present affiliation, are there any obligations of the affiliated associations to the National association? And the echo comes: Just two obligations, the per capita tax of 50 cents and the 50 cent club rate subscription to the Bulletin.

"Has the National then a sphere of activity which the affiliated states are bound to respect? And we are almost alarmed to hear the echo: None whatever. If a state association sees fit to take up a National question with Congress, it does so regardless of the activity of the National, or how it mixes up or belittles the effort of the National. Or, if an affiliated association decides to conduct a monthly magazine or select a trade paper as its organ, it does so without regard to its effect on the National, which each affiliated state should feel obliged to take into consideration.

"Do the affiliated states feel obliged to coöperate in the other efforts of the National? On the contrary, cooperation in many cases is held very lightly and strange as may seem, statements have been made by officials in disgruntled moods that they could do without the National.

"Does the National feel bound to coöperate with the affiliated states? Now, the official family of the National seems to feel the sense of obligation to the affiliated associations, but they are handicapped for want of a well defined outline of the reciprocal obligations that should exist between the National and affiliated associations.

Mutual Obligations.

"Are there definite obligations which one state has to another? In the main, there is an exchange of efforts which has done much to build up different features of Association activities, but without any definite obligations between states. The personal ambitions of officials and members have at times developed antagonism, which would be avoided if our organizations assume that definite interchange of obligations which should be assumed in an organization of our strength, and we can blaze the way for other organizations by defining the interchange of obligations which should exist.

Cooperative Insurance.

"Do the Hardware Cooperative Insurance organizations, as one of the Association's activities, recognize a cooperative obligation to the National Association and the affiliated Associations? They have in the past stated on their application blanks, 'Association Members only,' but increased strength and financial assets have developed personal ambitions which have led to acts far from cooperation, with the National or affiliated bodies. At such times they have lost sight of the one Big Asset, the National and Affiliated Associations, and of the full feeling of cooperation between the several insurance organizations which should exist.

"It seems to me, gentlemen, that these questions are of vital importance, and if their answers are out of harmony with the desired object, then the next step is to rectify conditions so their answers will ring true. It seems to me the time has arrived when each state should definitely go on record on the following points:

"First—That a National Association is just as essential as a State Association.

"Second—That the self-interest of each state association demands that each state act *with and for* the National Association.

"Third—That each Association by affiliating with the National Association, agrees that it will not take any action which will prejudice the interests of the National or the other affiliated Associations.

"Fourth—That each state in convention assembled should ratify its affiliation with the National Association, and that each state so ratifying shall through its officers, fill out formal certificate of ratification and file with the National Association. The National Association, through its officers, shall formally acknowl-

edge the receipt of said certificate of ratification by issuing a certificate of Completion of Affiliation under the Great Seal of the National Association, duly signed by the officers of the National Association.

"Fifth—That the State Associations assume the responsibility of impressing upon the members the necessity of all being familiar with the defined obligations to and between the National and State Associations, and their proportionate share in those obligations.

"Sixth—That the Pittsburgh Convention take steps to outline the obligations to and between the National and State Associations, for formal ratification by the State Associations.

"We would thus live up to the time-honored idea of success through cooperation. Recognition of well defined obligations by individual members and by State and National Association spells a greater Retail Hardware organization, and what is better still, more efficient service by the Associations for the membership, who in turn will be able to give more efficient service to the consuming public."

Other interesting addresses were made at the afternoon session as follows:

"Problems of Small Associations," by R. W. Hatcher, Past-President Georgia Retail Hardware Association;

"Association Efficiency," by H. W. Sibley, President New England Retail Hardware Association;

"Future of the Small Town," by W. A. Denny, President Missouri Retail Hardware Association.

Concise statements were made by National Secretary Herbert P. Sheets and department managers to inform the delegates concerning the National equipment for constructive membership service and to get helpful suggestions from the delegates for the betterment and widening of the service.

After the adjournment of Wednesday afternoon's meeting, an outing and dinner at "The Pines" was given to the delegates and their guests with the compliments of the Pittsburgh and Pennsylvania and Atlantic Seaboard Hardware Associations. Music, dancing, outdoor sports, and moving pictures formed the principal features of the entertainment. Special street cars were chartered for the occasion and transportation was furnished free of charge.

Three hundred and fifty guests sat down to the savory chicken and waffle dinner. So generously and efficiently had the local entertainment committees arranged the details of the outing and dinner that everyone was pleasantly surprised and delighted.

Thursday, June 26, 1919.

A study of more than ordinary importance occupied the first place on the program for Thursday morning's meeting, namely, "Merchandising Research," by John B. Swinney of the Retail Research Association, New York City. It was clearly demonstrated that the principles and practice of retail salesmanship as well as of store management in all its phases have been compiled, collated, and classified into a science lacking little of the precision of laboratory results.

Following Mr. Swinney's address, Charles W. Asbury, President American Hardware Manufactuurers' Association, spoke to the Convention on trade topics and gave an account of his recent visit to Europe as a member of a special commission of investigation in behalf of the United States Government.

After Mr. Asbury's speeche, H. O. Roberts, Secretary Minnesota Retail Hardware Association, delivered an address on "Inter-Association reports." He was followed by F. J. Banta of Low Point, Illinois, who dealt with the subject of "The Future of the Small Town," and explained how he did a business of $400,000 a year in a town of 200 inhabitants.

The afternoon session began with a consideration of the proposed revision of the constitution and by-laws as recommended by the Executive Committee for the extension of the work of the National Retail Hardware Association. The Convention adopted the changes and revisions substantially as presented by the Executive Committee.

Plans for the year were discussed in a symposium by state secretaries as to methods and ways by which organization work may be made more effective. Then came reports of the Convention Committees.

The report of the Resolutions Committee gave a statement of principles upon which its deliberations were based. The complete text of the report is as follows:

Report of Resolution Committee to the Twentieth Annual Convention of the National Retail Hardware Association, Pittsburgh, Pennsylvania, June 26, 1919.

It is the object of the National Retail Hardware Association to encourage a more careful study of the merchant's economic function and to educate its members to higher business standards; to search out and secure the adoption of such better business methods as will result in most economical merchandise distribution; to promote and maintain friendly relations and intercourse between retail hardware merchants for the exchange of experiences and ideas to this end; to encourage uniformity of trade practices, the elimination of trade evils and the reform of commercial abuses; and, in general, to inspire such friendly cooperation among retail hardware merchants, manufacturers and jobbers as will advance their mutual interests and extend their usefulness through most efficient service to the public.

Whereas, We see with the greatest concern the doctrines of Bolshevism and Anarchism apparently taking root in this country. And, whereas, we feel that it is strictly un-American and against all established and stable government and is being preached here by agitators unwilling or incapable of becoming good American citizens, and that said undesirables are preaching it successfully to the weak and vicious of our people.

Therefore, Be it resolved that we urge a policy on our Government of firmness and severity in the handling of these people. We recommend the return to their Fatherland of the foreign element, the strict confinement of the American citizens, and a much restricted policy of immigration which will effectually close our doors to all undesirables. Resolved, furthere, that we pledge our Association to use all of its influence in creating the demand for such legislation and to upholding it when enacted.

Whereas, There were certain citizens of foreign

countries living in America who, when called upon in the hour of America's need to render military service, refused on the grounds that they were citizens of another country. And, whereas, we feel that such a one should be considered an undesirable and is incapable of becoming a patriotic citizen of this country.

Therefore, Be it resolved that this organization go on record as favoring a law returning to their native country all such and making it impossible for them to again gain admittance to America.

League of Nations.

Now that the supreme task of the civilized world in crushing the insolent attempt of German autocracy to substitute a military dictatorship for self-government and the right of independent thought has been accomplished, an equally great task faces us, for the safety of the world must be secured by a League of Nations to insure justice and enforce peace. We rejoice in the establishment at the peace conference of a League of Nations to enforce Peace and Justice throughout the world; and favor the entrance of the United States into a League of Nations, believing it essential to safeguard the peace that has been won by the joint military forces of the allied nations.

Thrift.

Whereas, The Treasury Department has inaugurated a Thrift movement to follow up the splendid start which the people of the United States made during the war toward conservation and through their representative, Mr. Lewis, has asked us to coöperate in the movement. Therefore, Be it resolved that the National Retail Hardware Association do most earnestly endorse the movement and pledge ourselves to assist in every way in making it a success. And, the National Secretary is instructed to write each State Secretary asking him to circularize each of his members urging the most hearty cooperation of himself and his employes in this most important movement.

Elimination of Non-Essentials.

We heartily commend the policy of the manufacturers who are standardizing ttheir products through the elimination of such styles, sizes, finishes and other variations from type as are non-essential and add nothing to the utility of the goods, and urge that such policy be adopted by manufacturers generally and supported by all jobbers and retailers.

We urge upon retail hardware merchants the wisdom of using greatest care in the selection of their merchandise so that their stocks may be more uniform, with less duplication of items, by avoiding too many brands of goods of the same general class, which tends to increase stock unnecessarily, ties up capital, and weakens selling effort by making concentration difficult or impossible.

Trade Cooperation.

As the interests of manufacturers, jobbers and retailers are in a large measure identical, and neither branch of the trade can be permanently successful without the cooperation of the others, we urge our Association to arrange conferences with manufacturers and jobbers that the interests of each may be advanced and the public benefited by the prompt and economical handling of the merchandise distributed through the retail hardware trade.

We strongly favor the use of standard price lists by manufacturers and urge jobbers to discontinue as quickly as possible the special price lists which handicap the retailer and his service to the consumer, and that they furnish the retailer with discount sheets as often as is practical.

We endorse the recommendation of the National Association of Purchasing Agents that 7½ by 1⅝ and 5¼ by 7½ be the standard sizes for all catalogues and similar literature.

Business Integrity.

We strongly condemn the manufacture, sale and distribution of misbranded articles and all forms of advertising and selling which are misleading, untruthful, exaggerated, unfair, fraudulent and otherwise harmful, and urge the passage by state legislatures and the national congress of honest advertising and other laws for the regulation and elimination of all such practices.

We endorse the action of the Federal Trade Commission in recommending to Congress the enactment of a law for effective regulation of predatory price cutting as in line with the public interest, and urge the early passage of such a law as will prevent the demoralizing results which arise from advertising and selling a standard advertised merchandise at cut prices for the purpose of misleading the public and prejudicing the interests of legitimate merchants.

Good Roads.

Realizing the utmost importance to our entire country of permanent good roads, and feeling that any community which neglects to take advantage of this Federal aid in failing in a duty it owes to this and future generations, we heartily endorse the advanced position which our National Government has taken in furnishing half the cost of construction and experienced supervision and the National Hardware Association urges every community to take advantage of this opportunity to the fullest extent.

National Legislation.

As business men realizing fully the absolute necessity of applying advanced improved methods to our national appropriation, we urge upon Congress the inauguration of a consistent, business-like National Budget System.

Feeling that the Federal employment system has been of real service to both employer and employe, we endorse its continuance and extension.

As American business men, we look with pride and approval upon the gratifying extension of our merchant marine and welcome the idea that American goods will be carried under the American flag to all ports of the world.

Recognizing the urgent need of additional transportation for our rapidly increasing commerce, this Association endorses the national development of our waterways.

We recommend the repeal of the luxury tax because of the difficulty of justly enforcing same.

At the close of this most pleasant and profitable meeting, we extend to our hostess, the city of Pittsburgh, thanks and greetings. Here we have imbibed enthusiasm and each of us will carry back from the push and bustle and insight into her wonderful enterprises an added enthusiasm for our business, and the advance of our several communities.

Particularly do we express our appreciation of the efforts of the committees from the Pennsylvania and Atlantic Seaboard and Pittsburgh Retail Association for their untiring efforts for our pleasure. We highly appreciate the courtesy of the American Steel and Wire Company for their interesting and cordial entertainment.

We thank Mr. William Mather Lewis, Dr. J. T. Holdsworth, Mr. John B. Swinney, and Roy F. Soule for their inspiring addresses, and we assure our lady members that a hardware convention, without them, would be as dry as Pittsburgh will be next week.

In Memoriam.

WHEREAS, Since our last convention the Angel of Death has been among us. A familiar face is missing. A well-known voice is forever stilled.

M. L. Corey, who through nearly a score of years served this Association as Secretary faithfully and well, putting into it his best thought, his utmost ability and his untiring energy for the advancement of the retail hardware business, is gone.

We have lost not only an able secretary, but a wise counsellor and a sympathetic friend.

He shared with the Association, its struggles, its disappointments and its successes. He fought its battles as it has been given to but few to fight. How well his task was performed can only be appreciated by the passing of the years and the fruitage of the work which he began.

Therefore, in testimony of our appreciation of his virtues and his worth, this testimony to his memory is lovingly inscribed.

The following members were selected to conduct the affairs of the organization for the ensuing term:

President: J. M. CAMPBELL of Bowling Green, Missouri;

Vice-president: MATTHIAS LUDLOW of Newark, New Jersey;

Secretary: HERBERT P. SHEETS, Argos, Indiana;

Treasurer: MILO J. THOMAS, Corunna, Indiana;

Executive Committee: F. B. BOYCE, Wellsville, New York; E. M. HEALEY, Dubuque, Iowa; C. H. CASEY, Jordan, Minnesota; HAMP WILLIAMS, Hot Springs, Arkansas; F. E. STRONG, Battle Creek, Michigan; CHARLES HALL, Indianapolis, Indiana; and R. W. HATCHER, Milledgeville, Georgia.

Buffalo, New York, was chosen as the city in which to hold the 1920 convention of the National Retail Hardware Association.

A two-hour automobile tour of the splendid Pittsburgh boulevards and drives, including the great Highland Schenley parks, was tendered to the delegates and their friends at the end of Thursday afternoon's session by the local entertainment committee. The trip was under the guidance of Walter F. McQuiston, chairman of the Automobile Committee.

About 85 automobiles were placed at the service of the party, each car being decorated with two American flags. The trip was delightful from every point of view. Cloudy skies prevented the hot sun from beating down upon the guests, but there was no rain to render the roads wet or disagreeable.

Many of the delegates remained for the special visit Friday, June 27, to the Donora plant of the American Steel Wire Company where they were given an opportunity to study all the processes of steel and wire making from reduction of the ore to drawing and galvanizing of wire and the manufacture of nails and woven wire fence.

While the hardware retailers were engaged in an inspection of the plant of the American Steel and Wire Company, the ladies met in the Parlors of the William Penn Hotel at 10 a. m. and were conducted on a visit to H. J. Heinz Company's plant where luncheon was served. Mrs. Charles W. Scarborough, wife of the Secretary of the Pittsburgh Retail Hardware Association, acted as leader of the Ladies' Entertainment Committee under whose direction the visit was made. Much praise is due to both the ladies' and men's entertainment committees for the friendly, generous, and hospitable manner in which they treated the delegates and their guests.

IS BUILT TO STAND HARD USAGE.

The Buffalo Sled Company of North Tonawanda, New York, makes the Junior Roadster Convertible, shown in the accompanying illustrations. This roadster can be changed to a coaster and will stand hard usage. The iron parts are all japanned and baked. Instead of nuts, cotter pins are used because the Buffalo Sled Company claims they are equally efficient and can be more easily replaced if lost. The wheels are of the standard automobile type, the hub and bushing being made of cold rolled pressed steel. The spokes are of well-seasoned second-growth white ash, ovaled, mitred, and machine riveted in the hub, with the bushing turned over the ends. The bolsters are of hard maple well shaped and ironed.

Junior Roadster Convertible, Made by Buffalo Sled Company, North Tonawanda, New York.

Showing Box of Junior Roadster Changed to Coaster.

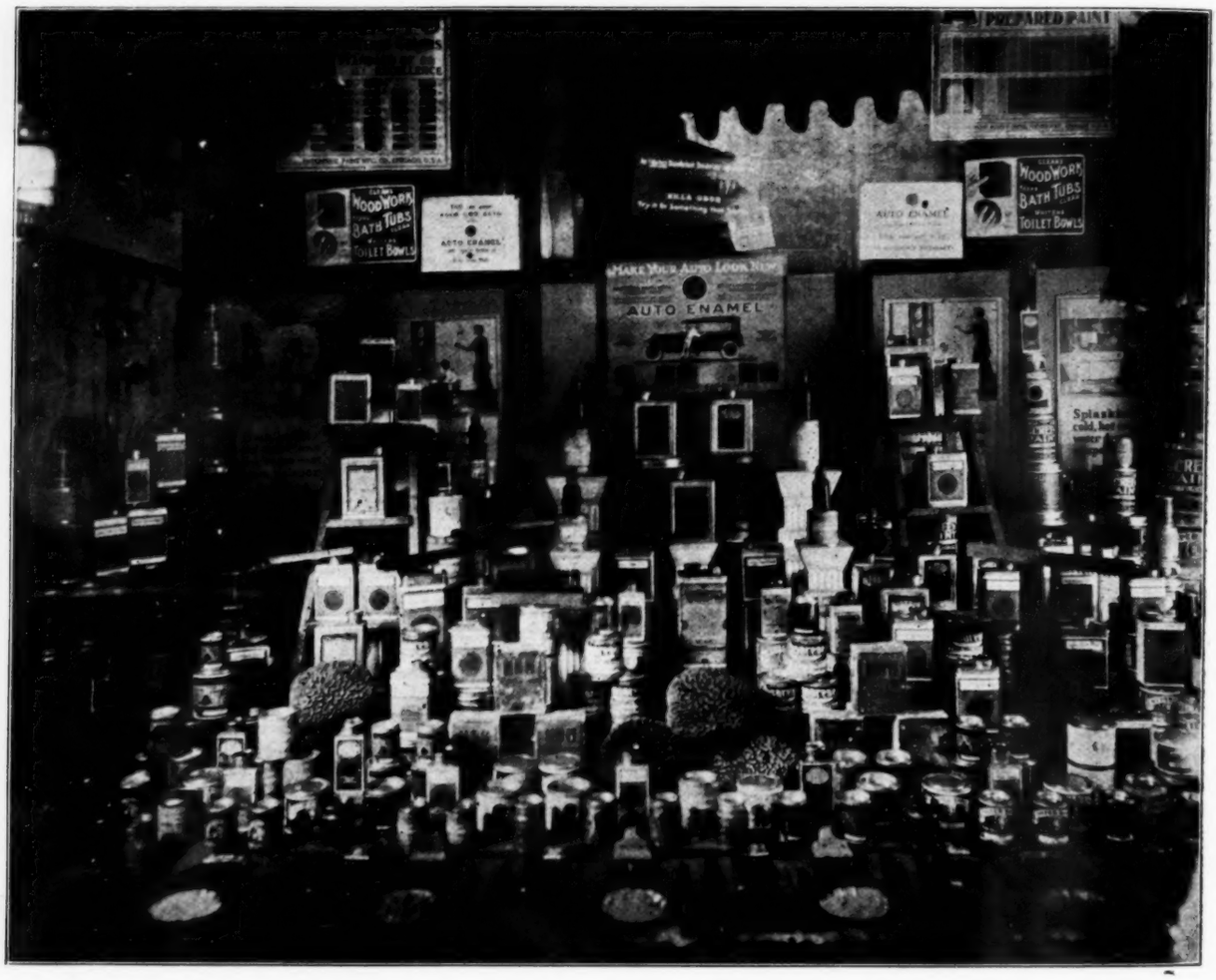
White ash forms the bed of the Junior Roadster Convertible and it is finished with a natural grain and filled and varnished with the special wear-resisting compound which is used on all the Buffalo Sled Company's products. The bearings are hard-drawn Bessemer steel rollers, running on cold-drawn, true steel axles. The specially designed cap protects the hub and bearings from dust and grit. Sliding out and constant wear on the roller bearings is prevented by a special washer. All children can be made very happy with the Junior Roadster Convertible and dealers should write to the Buffalo Sled Company, Department C, North Tonawanda, New York, for literature and catalog.

PRINCIPLES AND EXAMPLES OF GOOD WINDOW DISPLAYS.

COMPREHENSIVE WINDOW DISPLAY OF PAINTS AND PAINTING SUPPLIES QUICKENS STORE'S SALES.

Exceptions prove the rule. Ordinarily it is not advisable to fill the available space of a display window with a big collection of goods—even though the goods are all of the same class. The reason is that too many articles within the field of vision make it difficult for the eye to focus slowly enough to give each article the proper amount of attention in its turn. The observer is likely to give a cursory glance at them and pass on his way. The probability of his giving scant notice to such a display is deepened when the commodities have the same general appearance. In that case, the absence of contrast intensifies the likelihood of indifference on his part. We judge and see things by comparison. For example, it is a well-known fact that estimates of distances are hard to make in an open stretch of country where there are few objects to guide the vision.

The exhibit of paints and painting supplies shown in the accompanying photograph was placed on display in the hardware store of Geier and Peppler, 2767 Lincoln Avenue, Chicago, Illinois. Apparently, there are nearly two hundred objects in the window. Theoretically, the space is overcrowded. Practically, however, it is well utilized. By a clever arrangement of the various articles a series of contrasts is effected. The eye passes naturally from the center of the display to either side in a general survey of its contents and then returns for closer inspection of the several groups of related commodities. The posters, showing action in applying enamel to an automobile and brightening the interior of a home with paint, convey suggestions to the onlooker which enhance the appeal of the window display. The sales resulting from this window exhibit are the best proof of its excellence.



Window Display of Paints and Painting Supplies, Arranged by Geier and Peppler, 2767 Lincoln Avenue, Chicago, Illinois.

It costs you money to let your store get behind the times in either equipment or methods. The best trade will inevitably go to the most modern store.

HELP GET RID OF THE STUMPS.

A drive through the country districts will direct attention to fields that would be more productive and valuable if the owner considered the stump proposition as he should. Every acre of stump land cleared boosts the sale of implements and articles usually carried in an up-to-date hardware store.

The more attention the hardware man pays to the stumps in his territory, the greater his profits will be. Many a farmer has let the stumpy fields of his farm go untouched for years, waiting for time, money or for some one to call his attention to the loss he is each year having. The patriotic farmer can wait no longer. The time for action has arrived. Current reports show that many a farmer has realized the financial advantages of putting this land under cultivation, and is using dynamite to get rid of the troublesome stumps.

In some cases the hardware man knowing that the sale of the dynamite is only the first item through which he can derive profit has prevailed upon the farmer to act now. In other cases, the very high market value of farm products has put into the farmer's pocket the additional cash that he has been waiting for.

No matter what causes the stumps to be removed, once out of the way the hardware man naturally cashes in more profits on seeds, fertilizers, implements, etc., for the more acreage, the more business.

Explosive manufacturers find that some jobbers and dealers have been under the impression that the place where dynamite for stump blasting is most needed is in forest and cut-over land districts. But now on account of high prices for farm products, the sales in settled districts have increased in rapid order which shows that while cut-over lands do need dynamite, settled districts offer an immediate valuable opportunity which heretofore has been neglected.

THE TURN-OVER IS KEY TO PROFIT.

The turn-over is the key to retail success. What the turn-over means for the retailer may be seen from the fact that one dollar invested twelve times in one year will yield a greater percentage of profit than twelve dollars invested once.

OPPORTUNITIES FOR FOREIGN TRADE PRESENTED BY BUREAU OF FOREIGN AND DOMESTIC COMMERCE.

The Bureau of Foreign and Domestic Commerce through its Special Agents, Consular Officers and Commercial Attachés is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

29711.—The purchasing agent of a firm having large department stores in several different countries is in the United States and wishes to purchase for immediate delivery hardware, etc. Payment, cash, or terms suitable to seller. References.

29713.—Saws, files, tools, builders' hardware, industrial hardware, furnishing goods, general hardware, screws, etc., are required by a firm in Spain. Quotations should be given f. o. b. New York. Terms, cash against documents presented at destination. Correspondence may be in English. References.

29722.—The purchase of any line of manufactured articles sold by the hardware and garage trade is desired by a company in Canada. Quotations should be given f. o. b. destination, or factory. References.

29725.—The purchase and agency for the sale of bicycle parts, tires, and accessories, and automobile parts are required by a wholesale firm doing business in these articles in France. Terms, cash on receipt of merchandise. Correspondence should be in French. References.

29731.—An agency is desired in Scandinavia by a man from Norway, who is in this country for a short itme, for the sale of automobiles and accessories, motorcycles, etc. References.

29753.—A firm of manufacturers' agents in England desires to secure agencies for the sale in South Africa of hardware, motors and accessories, wire rope, agricultural machinery, etc. Quotations should be given c. i. f. port in South Africa. References.

29755.—The purchase of ice cream utensils is required by a firm in Wales. Quotations should be given c. i. f. British port. Terms, cash against documents, through bank.

COMING CONVENTIONS.

Mississippi Retail Hardware and Implement Association, Agricultural College, July 8, 9 and 10, 1919. D. Scoates, Secretary, Agricultural College, Mississippi.

The Texas Hardware Jobbers' Association, Galvez Hotel, Galveston, Texas, July 11 and 12, 1919. R. F. Bell, Secretary, 320 Broadway, New York City.

The American Hardware Manufacturers' Association, Atlantic City, New Jersey, October 15, 16, and 17, 1919. F. D. Mitchell, Secretary, 4106 Woolworth Building, New York City.

The National Hardware Association, Atlantic City, New Jersey, October 15, 16, and 17, 1919. T. James Fernley, Secretary, Philadelphia, Pennsylvania.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 17, 18, 19 and 20, 1920. H. O. Roberts, 1030 Metropolitan Life Building, Minneapolis, Minnesota.

Ohio Hardware Association, Hotel Gibson, Cincinnati, Ohio, February 24, 25, 26 and 27, 1920. James B. Carson, Secretary, Dayton, Ohio.

RETAIL HARDWARE DOINGS.

Arkansas.

George E. Williams has bought the Glover hardware store at Judsonia.

Kansas.

John Lewis has purchased the hardware, paint and oil and sporting goods stock of the E. R. Moses Mercantile Company at Hoisington.

Panning and Isern, hardware and implement dealers at Ellinwood, have sold their store to August Lantermann, Jr.

Missouri.

Walter Beck has opened a hardware store at Slater.

Nebraska.

E. Taborsky has sold his hardware store at Geneva to Henry Gewecke.

Gardner and Hansen have bought C. F. Madison's hardware store at Elm Creek.

Ohio.

The Spatholt Hardware Company, Leitonia, has been incorporated for $20,000 by W. W. Long, C. J. Spatholt, S. V. Shive and Fred G. Spatholt.

Oklahoma.

The Parkinson Trent Mercantile Company has sold its hardware stock to the Knight Hardware Company at Okmulgee.

South Dakota.

C. L. Larsen has bought the hardware stock of G. H. Patton Company at Chester.

H. A. Peterson has sold an interest in his hardware business at Mitchell to Thune Brothers.

Tennessee.

The F. H. Rogan Hardware Company, Rogersville, has been incorporated for $15,000 by F. H. Rogan, H. O. Davidson, W. C. Lee, B. F. Hale and W. B. Hale, Jr.

Texas.

The Star Hardware and Furniture Company, Sinton, has increased its capital from $7,000 to $10,000.

Wisconsin.

The Ed Leibly hardware store, Rice Lake, has been sold to the Consumers Store Company.

ADVERTISING CRITICISM AND COMMENT

Helpful Hints for the Advertisement Writer

ADVERTISING WITH TRADE-MARK IS BEST FORM OF PUBLICITY.

Suppose a manufacturer has for years advertised his product under a certain trade-mark in the form of a picture, word or fantastic shaped mark, and his plant should be destroyed by fire or explosion, he could start right in the next day to manufacture his product through the cooperation of a competitive plant if necessary and sell his goods without delay. This is because he has built up an asset by advertising his trade-mark which none of nature's elements can destroy. He has created a product under a certain trade-mark and advertised his trade-mark so that he has actually educated the public to demand his product.

* * *

There are so many strongly accented advertisements in the average newspapers that a plain announcement such as that of the McCabe Hardware store in the *Daily Nonpareil,* Council Bluffs, Iowa, may attract

POULTRY NETTING.

All heights, from 1 to 6 feet. Double selvage, double galvanized the kind that lasts.

Cut lengths, per square foot	11½c
2 feet high, 150-foot roll, 2-inch mesh	$4.50
3 feet high, 150-foot roll, 2-inch mesh	$5.90
5 feet high, 150-foot roll, 2-inch mesh	$7.50
6 feet high, 150-foot roll, 2-inch mesh	$9.00

I have in stock a combination poultry and rabbit fence that will turn little chicks at the bottom.

I also carry in stock the Henery combination stock and poultry fence in 4x5 feet.

McCABE HARDWARE.
Phone 635.

attention by reason of the very fact of its simplicity. In the small space which it occupies there is not room for more than a statement of prices and sizes. This is a better use of the space than filling it with generalities about poultry netting without quoting particulars in dollars and cents.

* * *

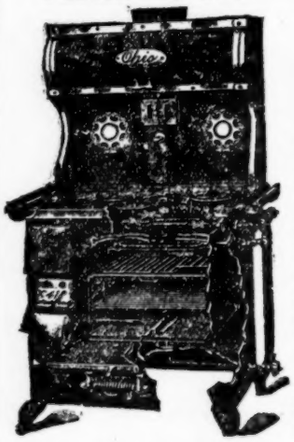
PROFITS COME FROM REPEAT SALES.

Remember, no advertised business succeeds wholly on the basis of sales made by advertising, says George Frank Lord in the Du Pont Magazine. Ordinarily, the advertising cost of such sales is greater than the margin of profit on the sale. The only chance for profit lies in repeat sales to the same buyer or sales to his friends, and these must be based on satisfactory service. Each satisfied customer, like the pebble thrown into still water, becomes the center of a widening circle of buying influence. In like manner, each dissatisfied customer becomes the similar center of a circle of antagonism.

One does not have to be a philanthropist to adopt this ideal of service. If the commercial crook could at all times control his natural tendency to steal, he could shrewdly adopt the same principle and continuously succeed in business.

A direct, friendly talk with prospective buyers is the commendable substance of the advertisement of the Clark Hardware Company which appeared in the *Jamestown Morning Post,* Jamestown, New York. It

ARE YOU PREPARED to Enjoy this Summer



Or are you planning to spend it over a smoky, smelly, inefficient cook stove bewailing the fate that allotted to womankind, the work of preparing food in a hot stuffy kitchen, while the rest of the family array themselves in "Duck flannels" and linens and forget that trouble exists. Why not enjoy life with the rest and know that a half hour's work with a good thoroughly efficient kitchen range will prepare a dinner fit for the most exacting. We have the best obtainable in gas or combination ranges at prices which are very reasonable, and we sell them at the cash price on

EASY PAYMENT TERMS

Buy a really efficient range now and be prepared to enjoy the hot weather. All stoves back by our liberal, binding guarantee.

Clark Hardware Co.
Stores on Main Street.

is, first and foremost, sincere. The picture which it draws of a woman spending the best part of the summer over a smoky, smelly, inefficient cook stove while the rest of the family disport themselves in cool raiment has a subtle touch of sympathy which is sure to make a favorable impression upon her. She is likely to answer the call of such an advertisement and visit the store where the people understand her troubles and offer her a solution of them. If one or two prices were quoted in the advertisement, it would be much nearer perfection.

* * *

PROFITABLE PUBLICITY MUST RELY UPON ASSET OF CONFIDENCE.

The whole drawing power of an advertisement arises from the confidence of the reader in what he is reading. If the advertisement itself is not written in a trustworthy manner, or if the public learns its statements are false, or more particularly if it is printed in an untrustworthy medium, the advertisement will not draw.

Every successful man intends to make his advertisements honest; but he does not always carry out his intention. Certain conventional statements about values have gotten in, and these vitiate the drawing power of advertising 50 per cent. Merchants are learning this, and advertising is constantly becoming wiser in this regard.

* * *

The path of advertising is the path of success.

HEATING AND VENTILATING

DEALS WITH PROBLEM OF VENTILATION.

In his discussion of certain problems of ventilation at the last quarterly meeting of the Master Tin and Sheet Metal Workers' Association of Philadelphia, Pennsylvania, B. F. John took up the question of expelling the cooler foul air that occupies the space which is intended to be heated. The part of his address, ending with this question, was published on pages 30 and 31 of the May 3, 1919, issue of AMERICAN ARTISAN AND HARDWARE RECORD. The following additional portions of his talk are given because of their timeliness at this season of the heating trade:

"I have had three jobs of this kind but unfortunately in the haste of completion I could not spare the time to prove thoroughly my theory in two of them, yet the air changes far faster, and without notice in these two The other I took pains to see the effect. The house is located at Hartford, New Jersey, a low rambling stucco walled house, figured exactly as to cubical contents, wall and glass surface, and the risers and registers of the proper proportion. The cold air duct, from outside and the North West is 75 per cent of the entire area of the heat pipes; each wall pipe has the proper area and nearly all rooms heated by individual raisers. The effect in the winter of 1917-18 at 7 degrees below zero was a warm spring atmosphere and the cigar smoke traveled in a straight line at 7 inches above floor line to a center stairway to the attic, which was warm and the foul air discharged under the eaves of the roof. The owner reports constant heat, better health in the undergrowth children being educated there, and the pleasantest winter spent indoors. This house is open on four sides and to the East and South and West subject to all the prevailing winds. I admit there are some things that take place in the system I do not quite understand as yet, but with a little more experimenting I feel I will be able to work out the solution. I have two other jobs in view, one of which I will install a ventilation system complete, and keep comparative costs of ventilating and heating each room for future reference, but I repeat I believe that ventilation can be done in home heating far less expensively than we now suppose, and if we collectively experiment on each job we perform, our combined knowledge will prove this to be a fact

I feel that our system of introducing cold air is not altogether correct, as I believe we can originate a plan, whereby the warm air heater can be made to draw the necessary cold air and no more. We suggest that the cold air be taken from the North and West, presumably because these are the prevailing winds sides during the heating season, yet it is reasonable to suppose the cold air might be taken from above the roof or from the East and South if provided with necessary traps and swinging damper or from both Northeast and Southwest.

I believe that with the slight experience I have had, the house 8-inch electric fan can be made an adjunct to the successful heating and ventilating plant when placed properly in the cold air supply. The travel of air at varied temperatures differs in velocity and direction and it is this one thing I firmly believe on which all else in heating and ventilating depends, and in order that we may encourage experiment I would suggest that this organization purchase the necessary instruments and thermometers for this purpose, to demonstrate to our members their use.

Although it has been difficult I have refrained from discussing the subject of humidity which is all important in heating and ventilating, as you all know, because it is a subject which I believe should be dealt with alone in a separate paper. I have also refrained from mentioning "warm air heater construction" because we are now being assured by The Society of Heating and Ventilating Engineers that the subject will receive a thorough examination in their testing laboratories and I am very much afraid that the reports we shall receive from this disinterested body will not be what we expected. I might add in this regard, however, no matter what that report may be, we as individuals are largely to blame, if it is not favorable to our expectation, because we have not sought to demand better and still better, but have been too easily satisfied with past and present conditions, both in the material and tools used in our trades.

In conclusion let me urge you to discuss this paper after you have re-read it, pull it apart and criticize it as it is written entirely with a view of making you desire to write a "better one."

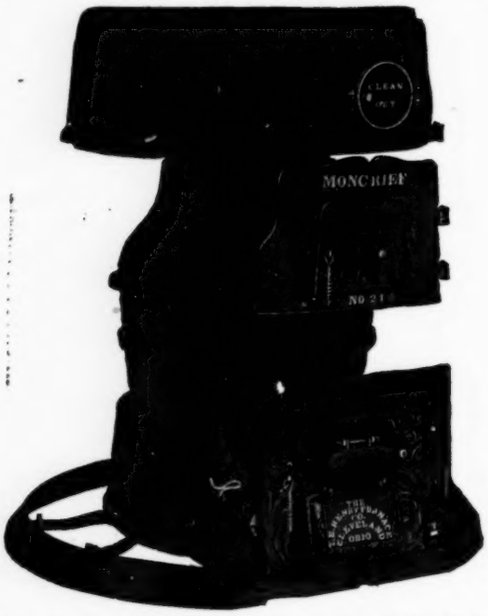
Read all you can about ventilation, and do some simple experimenting on each job. You might imagine as I did that it is a very dry subject, but you will be agreeably surprised as it is one of the most interesting stories I have ever read, and I am now engaged in collecting data on it merely for reference, and I am eager for the next chapter."

COUNTERACTS EFFECT OF EXPANSION.

The Moncrief Warm Air Heater which is shown herewith is made of all cast iron. It is a durably constructed heater, the iron being carefully distributed, thus placing the heaviest parts where there is the greatest strain. The Moncrief grates are a special feature as they are operated so as to make the use of a poker unnecessary. The fire pot is heavily constructed and nearly straight, making it almost impossible for coal or ashes to lodge on the sides. It is made in two equal sections. The larger amount of live fuel is contained

in the upper section and this more readily expands than the lower section where the ashes accumulate.

This construction, with the cup joint in the center, is said to counteract the effect of the unequal expansion and contraction of a solid fire pot—thus it will not crack. The radiator is a large combustion chamber crowned with an all cast top return flue which compels the products of combustion to travel around

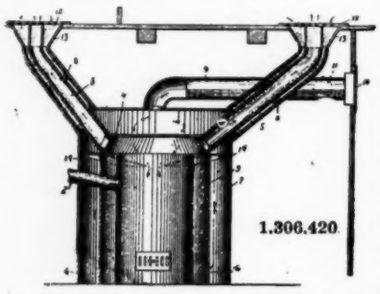


Moncrief Warm Air Heater, Series A, Manufactured by the Henry-Miller Foundry Company, Cleveland, Ohio.

both sides of the top before entering the smoke exit. By this method, every available unit of heat is extracted thus making this feature particularly economical. The Company's literature and price lists may be obtained by addressing the Henry-Miller Foundry Company, Cleveland, Ohio.

PATENTS WARM AIR HEATING SYSTEM.

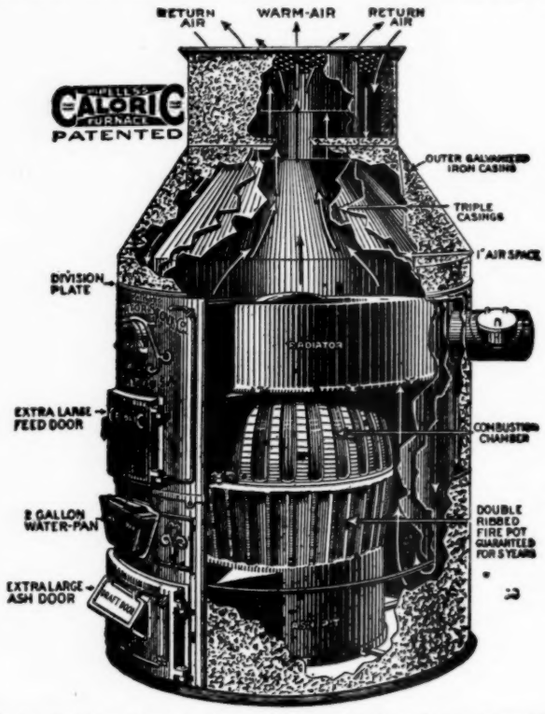
William G. Felton, Wakeman, Ohio, has obtained United States patent rights, under number 1,306,420, for a warm air heating system described herewith:



In a warm air heating system, the combination of a warm air heater, a primary jacket fitting about said furnace and being spaced therefrom, said primary jacket having openings formed therethrough adjacent its lower portion, a smoke flue leading from said warm air heater, a secondary jacket positioned about said primary jacket, deflector plates carried by said primary and secondary jackets, the ends of said deflector plates being spaced apart out of vertical alinement with the openings formed through said primary jacket, a fresh air flue connected to the top of said secondary jacket, in vertical alinement with the top of said primary jacket, thus causing the cold air to be first injejcted on the top of the primary jacket and then deflected by said plates around the primary jacket and pass through the openings in the primary jacket and be heated by the furnace, warm air pipes leading from the primary jacket and cold air pipes communicating with the secondary jacket.

GUARANTEES FIRE POT FIVE YEARS.

The Monitor Stove Company of Cincinnati, Ohio, was established in 1819 and is listed among the pioneers of pipeless heating. The Company's Caloric Pipeless Heater is shown in the illustration herewith. The attention of dealers and installers is particularly called to the Company's guarantee against price decline. It declares that if it is able to reduce prices during the time that the heaters are booked, the dealer's account will be credited with the difference between the price he paid and the lowest price quoted by the Company during that period. The Caloric Pipeless Heater has three casings with a one-inch air space between each. The outer casing is made of galvanized iron. The Company guarantees its double ribbed fire pot for five years. There is an extra large feed door and ash door and a two gallon water pan. The register



Caloric Pipeless Heater, Made by The Monitor Stove Company, Cincinnati, Ohio.

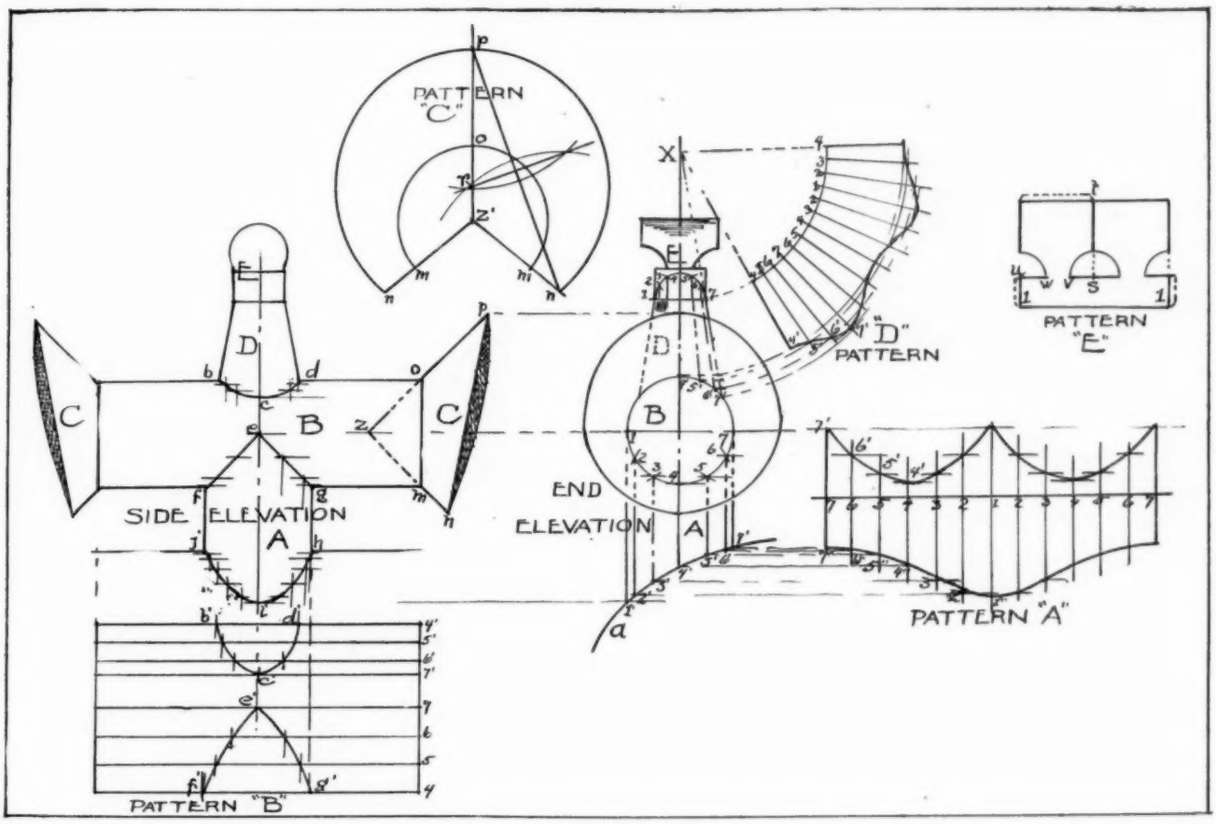
is set into the floor directly over the heater. All drafts in this heater are regulated from the floor above and it requires very little attention. In this connection, special attention is called to a convincing booklet just issued by the Company dealing with the Caloric system of heating industrial homes. It is profusely illustrated with photographs of houses built by various big corporations for their employes. These homes, it is said, are very comfortably heated by the Caloric warm air heaters; and a number of letters are reproduced in the pamphlet from several corporations testifying to the satisfaction derived from the installations. It would be to the dealer's advantage to get in touch with The Monitor Stove Company, 500 Gest Street, Cincinnati, Ohio, and obtain more detailed information.

PRACTICAL HELPS FOR THE TINSMITH

PATTERNS FOR PULLMAN CAR VENTILATOR.

By O. W. Kothe.

On Pullman coaches we see several designs of ventilators of which the one shown in this drawing offers the most interest for laying out. From the side elevation we see a right angle tee, also a tapering tee and a funnel C. In the end elevation we see the stem fitting on a curved surface which is the side roof of car and the hood E.



Patterns for Pullman Car Ventilator.

In laying out this, the end elevation is first drawn working from the center line X-4′, placing the horizontal pipe B the desired distance above the roof and then adding the taper D, after which the hood E. The roof line a, can be drawn at any time. The lower semi-circle of B is divided into equal parts and lines dropped to the roof line. Picking the girth from these spaces at B, they are set off as 7-7 in pattern "A". By dropping stretchout lines through these points and projecting over lines from each point in the lower semi-circle of B, we establish point 7′-6′-5′-4′ for the upper miter cut of tee. Repeating this for the roof line a, we establish points 7″-6″-5″-4″, etc., for the lower pattern. A line traced through all these points gives pattern for stem for ventilator.

The next pattern is the taper D, to which the hood E is attached. This taper should be made uniform, not too steep and not too shallow, extending the side line to the center line as at X. Describe the section below E and divide in equal spaces. From each of these points drop lines to the base line 1-7 and afterward radiate them from the apex X toward the pipe D, which establishes points 4′-5′-6′-7′. From each of these points square over points to the side line 7-7′. If this is not done the radial lines 4-5-6 are foreshortened because their true lengths can only be shown in the side line 7-7′. That is why these points must be projected to the side line.

To describe the pattern use X, as center and 7, as radius describe arc 4-4 and set the circumference from the half section E on this arc. From each of these points so established draw radial lines from the center X, extending them indefinitely. Then from each point in the side line 7-7′ sweep lines into stretchout crossing those of similar number as 4′-5′-6′-7′, etc., which gives the intersections for tracing the bottom miter cut. Laps should be allowed for flanging. The hood E can be laid out as in pattern "E". Let 1-1′ be the circumference for stem and let s-t equal half the circumference. Divide up the distance s-u so as to establish the side w-v. The width of this space must be governed by the diameter of stem. For a 6 inch pipe it ought not to be over 3 inches wide. Then

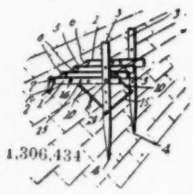
using s as center and v as radius describe the center and also the end arcs. Allow laps as shown and then cut in at the middle line s-t also cut out the semi-circle and the two quarter ends. By rolling the stem 1-1 the same as a pipe which is seamed or riveted the top part can then be bent over a stake and riveted.

The next important pattern is the funnel which has wire netting placed over the end so dust and other foreign matter cannot enter the car. For this a side view as at C must be drawn. By using the center z, the side lines m-n and o-p are made the same angle. To set out the pattern use z-o as radius and any place as z″ as center describe the arc m-o-n. On each side of point o, mark half the stretchout which can be taken from the lower semi-circle of pipe B. Draw the center line z″-p. With dividers pick the heel o-p from elevation and set as o-p in pattern. Then pick m-n from elevation and set as m-n in pattern. Joint the points n-p and bisect this line, squaring out which establishes the center r. This is a new center for describing the outer arc n-p-m. If a wire edge is to be enclosed then a lap must be added.

The pattern "B" we ordinarily mark out after the tee A, and taper D, are formed up and set in place. However, where many of them are to be made it is best to lay off the pattern. To do this draw the side elevation with miters e-f-g on a 45. The miter b-c-d is extended from the end elevation using those points and reproducing the small half section to this elevation the radial lines are drawn which intersect those drawn from 4′-5′-6′-7′ of end elevation. This gives the miter b-c-d. But for the miter h-i-j lines can be projected over from 1-2-3-4 of end elevation B to the miter lines e-g-f and from these points they are dropped. Then by bringing over lines from all points in the roof line a, to intersect those dropped from the miter line, this miter is established. But in this case it is not used unless the opening for the stem were desired. The girth for the pattern "D" can be picked from the lower semi-circle B in end elevation and set as 4-4′. Then pick the space 4′-5′-6′-7′ where the taper intersects the pipe B, and step them off as shown. Draw stretchout lines and from each point in the miter lines drop lines to those of stretchout of similar number which gives miter cut b-c-d and f-e-g in pattern "B". This is only a half pattern, the other half could be marked from this. Laps must be allowed on all edges for seaming and riveting.

PATENTS ROOF BRACKET.

Under number 1,306,434, United States patent rights have been granted to Philip P. Melanson, Mancton, New Brunswick, Canada, for a roof bracket, described herewith:



A roof bracket comprising base bars provided at their inner ends with depending prongs; supporting bars between the base bars; legs disposed transversely of the outer ends of the base bars and pointed at their lower ends; spacers between the bars at the forward and rear ends thereof; front and rear securing devices passing through the spacers and the bars; means for connecting the front securing device with the legs; at adjusted points longitudinally of the legs; braces having their lower ends pivoted to the legs; and means for connecting the upper ends of the braces with the base bars at adjusted points longitudinally of the base bars.

PROTECT THE TRADE INTERESTS OF CONTRACTORS AND DEALERS.

On broad principles of equity it is to the advantage of manufacturers, jobbers, contractors, and dealers to unite in the maintenance of a fair trade policy. It is best for the welfare of business that production and distribution be carried on as distinct functions. In the long run, only harm can come from the practice of soliciting orders among the customers of a dealer who is a patron of the producer who solicits the orders. The orderly processes of commerce are disturbed by such things and the manufacturer as well as the distributer lose prestige and profit. This matter received attention at the convention of the National Association of Sheet Metal Contractors which met June 10, 11, 12, and 13, 1919, in Columbus, Ohio. A committee dealing with the subject reported on it as follows:

Report of Committee on Trade Relations and Policy to Convention of National Association of Sheet Metal Contractors, June 12, 1919, in New Southern Hotel, Columbus, Ohio.

For the past three or four years your Committee on Trade Relations and Policy has been able to give somewhat optimistic reports on the attitude of the manufacturer and jobber in the distribution of their materials. Competing by the manufacturer and jobber with their own customers for orders seems to be on the decline and in many places practically eliminated.

Your committee regrets to report that the pendulum seems to have been swinging the other way during a portion of the past year. Needless to say, this has been a surprise, for several reasons, the principal one being the scarcity of material. It was almost impossible to supply the dealer, yet despite this, solicitations seem to have been made right over the head of the dealer and among his own customers. Another reason for surprise is the agitation that has been carried on for the past few years, showing the injustice of this practice to the dealer.

From Minnesota a complaint comes that the general contractor can buy anything in sheet metal from manufacturers and jobbers that he desires. Most of this material comes to him in such a form that a half-way mechanic can be used to put it in place, although this may be done regardless of appearance or stability.

Practically the same complaint comes from Texas, although they seem to specialize on metal shingles in that section. In these instances, there seems to be more effort made to reach the general contractor direct than to solicit the business from the sheet metal contractor. Would not the same result be attained with less effort and waste of time if the sheet metal contractor was coached instead of the general contractor?

Pittsburgh reports what may apparently be a curi-

ous instance, although it is by no means uncommon. A jobbing firm handling both steam and warm air heating supplies will sell the latter right and left, but no one except he is actually engaged in the business can get steam, hot water, or plumbing supplies.

Protection Through Coercion or Justice?

The attitude very naturally raises the question whether the protection given the master plumber and the steamfitter is not due to fear of coercion rather than upon the justice of their rights. If this protection is accorded as an act of trade justice, why the discrimination against the installer of warm air heating? Are his trade rights any less significant than those of the two other branches of the heating industry? In other words, is this class of firms waiting to be coerced into doing justice to its warm air heating customer? The sheet metal trade simply asks for justice and a square deal in the distribution of supplies and has no desire for any coercive measures to bring about an honorable condition.

Installations by Manufacturers.

A new disturbing element appears to have been injected into the situation. Complaint has come regarding warm air heater manufacturers establishing installation branches in different cities. There must be a discrimination between a branch supply house and a branch installation house. The former is for convenience in supplying the dealers in a given territory. The latter is instituted for the specific purpose of installing direct for the consumer and to all intents and purposes, eliminating the dealer. The function of the manufacturer is to produce his product and distribute it to the dealer, leaving the matter of installation severely alone. When he steps outside of this function, he is doing an injustice to that branch of the industry upon which he must rely in a large measure for support, because there are hundreds of small places in which he can not establish an installation branch. If this process of establishing installation branches on the part of the warm air heater manufacturer is carried to its conclusion, it means the wiping out of this part of the business of hundreds of firms.

Competition of Quality Rather Than Price.

These strictures should not be taken to apply to certain places where, for instance, the manufacturer confines his installation to his home city, and where such conditions are perfectly agreeable to the warm air heater dealers in that community. Your committee makes mention of this because there are some places in which this condition applies. There seems to be no disposition on the part of the trade of these places to interfere with a long established custom, because only the highest grade of installation is done and the dealer is fully protected by the manufacturer in the matter of price. In these cases, it is a competition of quality and not of price. The branch installation as constituted at present, and its future tendency is a matter of price rather than quality, the dealer is not considered and is unable to compete with it.

Your committee certainly feels that this attitude of the manufacturers establishing branch installation is unfair to the dealers and that the practice ought to be discontinued. In the long run, no more warm air heaters will be installed, neither do we believe the quality of the installation will be improved.

Another new line of sheet metal products is being handled by some of our members—metal lath. The matter of protecting those firms who take agencies for metal lath has been placed before the metal lath manufacturers' association, and we believe is in a fair way of adjustment to the satisfaction of all concerned.

Duty of Individuals In Complaint.

Your committee feels the necessity of again impressing the individual firms with the fact that they have something to do in the matter of securing and maintaining the proper distribution of material from manufacturer to consumer. Wherever complaints originate we try to impress on the complainant that the start to eliminate the undesirable condition rests with him. This seems to be the very thing that a great many do not want to do, or will not do. They seem to have the idea that if they pass the complaint on, often in a very indefinite manner, all they have to do is to fold their arms and wait for the millennium to come for them. In practically every instance the points at issue ought to be taken up direct between the dealer and manufacturer or jobber. If they can not be satisfactorily adjusted, they can be passed on to the larger body.

Last winter a firm offered to join the Association if it would guarantee him complete protection. It was pointed out to this firm what it ought to do within itself to start trade protection. If its own efforts failed, it could call upon the Association for its influence. Nothing whatever has been heard from that firm. It seemed unwilling to lend its own help to help itself.

Confer on Trade Protection.

The National Association of Master Plumbers and the Master Steamfitters has appointed a joint committee to take up these very problems. This Association has been invited to appoint a similar committee for a joint conference. The wisdom of this action is apparent when it is realized that the trade protection and other problems of the three organizations are practically identical.

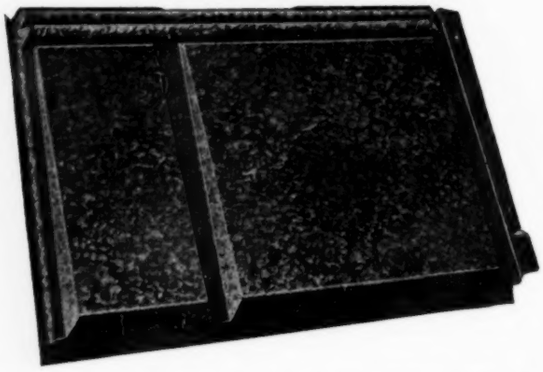
Your committee, therefore, recommends that it be empowered to confer jointly with the above named organization on these matters. It suggests itself for this conference work rather than a separate committee, because it is in touch with the very problems with which the joint conference will deal.

REPLACES WORD SPELTER WITH ZINC.

Everyone is familiar with the word zinc. Comparatively few know the meaning of the word spelter. Therefore, the members of the American Zinc Institute at their annual meeting last week in St. Louis, Missouri, decided that it would be better for the interest of all concerned to replace the word spelter with the more widely known term, zinc. It was the unanimous opinion that zinc, called by its right name, could be utilized and popularized for many new purposes under more stabilized conditions than have heretofore prevailed in this industry, and the members, representing all branches of the trade, have agreed to devote their efforts to this end.

SECURES PATENT FOR METAL SHINGLE.

The Milwaukee Corrugating Company of Milwaukee, Wisconsin, was awarded United States patent rights, on June 10, 1919, for its "Titelock" American Metal Shingle. This shingle is made in five different patterns, all of them being designed to represent the cedar shingle. In the accompanying illustration is



Patent for "Titelock" American Shingle Granted to the Milwaukee Corrugating Company of Milwaukee, Wisconsin.

shown Style R. The butt of the "Titelock" shingle is higher than the cedar shingle but it retains the general features of the cedar shingle. The panels are 10 x 14 inches in size, except the starter, a two panel shingle, which is 7 x 10 inches. The alternating effect of grooves and panel is made possible by this narrower shingle as it is inserted in every other tier, at opposite ends. A projecting tongue on one side of the shingle is inserted in a groove or fold in the other shingle in such a way as to prevent leakage of rain or melted snow and ribs or beads on the upper portion of the shingles. Usually when shingles are overlapped, it prevents the backing up of rain or water from melted snow. Further details and prices may be had by addressing the Milwaukee Corrugating Company, Milwaukee, Wisconsin.

HEATS IRONS QUICKLY AND CHEAPLY.

It is claimed by the manufacturers of the Double Blast Fire Pot Number 25, the Double Blast Manufacturing Company of North Chicago, Illinois, that it will heat soldering irons with particular rapidity. The fire pot, which is shown in the illustration herewith, has a sheet iron base made of smooth iron with a heavy wire in the bottom. It is dipped in japan and baked and is said to resist the action of gasolene and acid.

Double Blast Fire Pot Number 25, Made by Double Blast Manufacturing Company of North Chicago, Illinois.

The tank, which is made of galvanized steel painted with aluminum, is fastened securely to the base and is placed far enough away from the heat so that it will never get hot. Consequently, there is no danger of an explosion. The top and bottom are both double seamed on.

There is a large brass pump, one inch in diameter and ten inches long with which enough air can be pumped into the tank in one minute to run the fire all day, it is said. The generator is made of brass which will not rust or corrode. It has no packing and cannot clog as there are no small channels. It always burns a blue flame.

The independent generating valve is used in case the operator does not get enough gasolene into the drip cup the first time to heat the generator properly. Therefore, he can open the valve again and allow more gasolene to flow into the drip cup without interfering in any way with what is burning. For further particulars, those interested should address the Double Blast Manufacturing Company, North Chicago, Illinois.

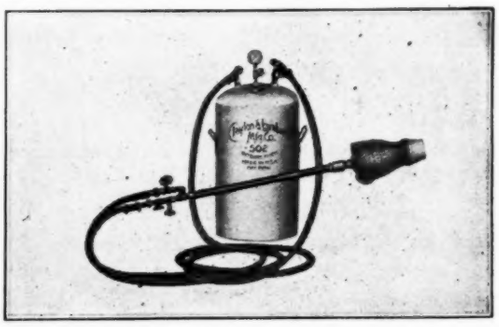
BUSINESS IS A MEANS TO AN END.

Business is but a means to an end. It is but the occupation by which you are to exercise and develop your innate qualifications and talents. It is the arena in which you are to practice day in and day out for the great race of the world—the successful life.

ADDS A NEW LINE OF OIL BURNING MACHINES WITH PATENT BURNERS.

A new line of oil burning machines has recently been added by the Clayton and Lambert Manufacturing Company of Detroit, Michigan, manufacturers for over thirty years of fire pots, torches, and braziers for alcohol, gasolene, and kerosene. These oil burning machines are fitted with burners that are made on a new scientifically correct patented principal and it is claimed that in this way perfect combustion is obtained that consumes less fuel and compressed air and uses more free air.

These machines are used chiefly for preheating before welding, for annealing, melting metals, straightening large frames, girders and rails, anneal-

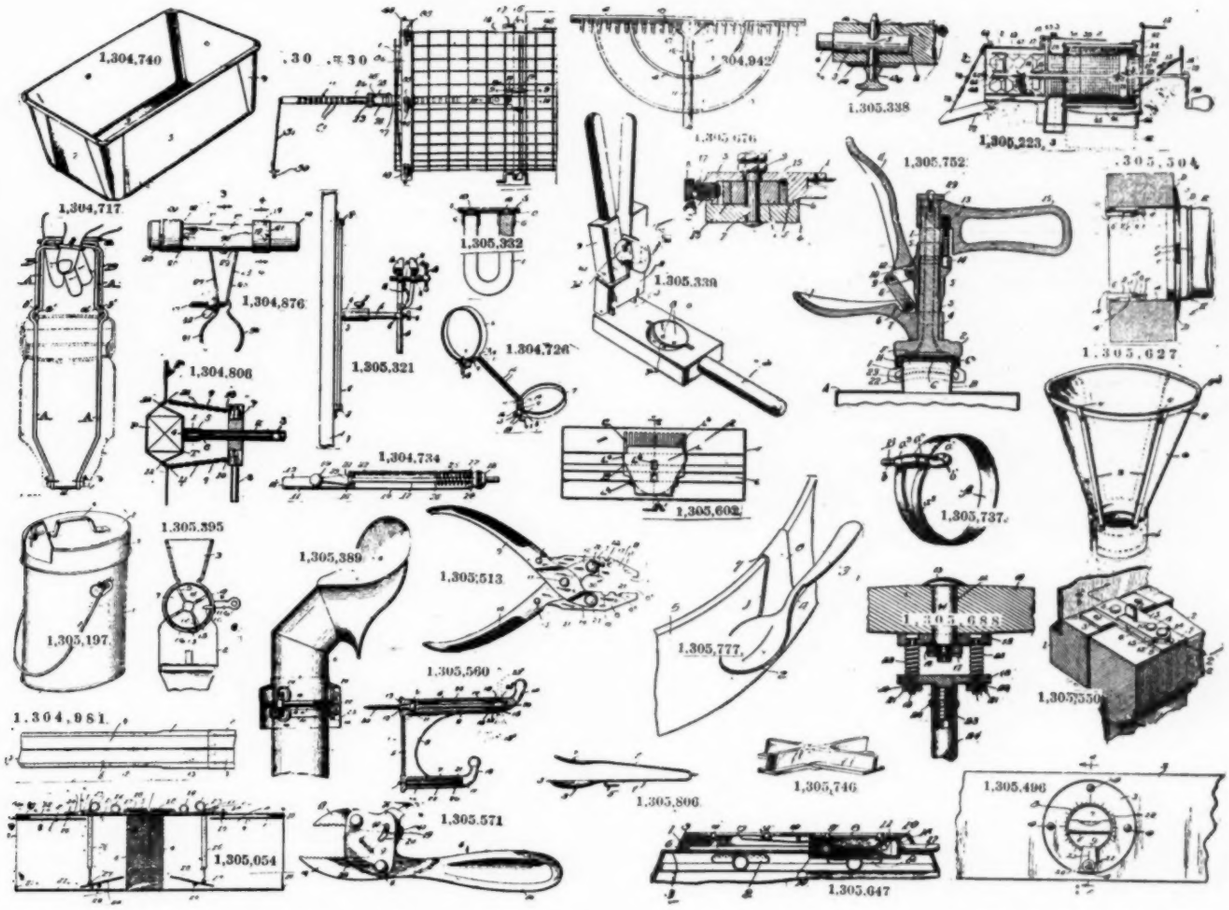


Oil Burning Machine, Made by the Clayton and Lambert Manufacturing Company, Detroit, Michigan.

ing armor plate and chains, shaping sheet metal work, brazing, heating and drying large ladles and skin drying molds and cores, lighting cupolas in grey iron, malleable and steel foundries, etc.

Large industrial and ship building plants, steam and electric railway shops, boiler and coppersmith shops will find these machines particularly useful. The fuel is crude oil, fuel oil, kerosene or distillate, and the machines can be operated by either compressed air or steam. Catalog and detailed description will be sent to those addressing the Clayton and Lambert Manufacturing Company, Detroit, Michigan.

NEW PATENTS.



1,304,717. Jar Lifter. Robert J. Thurston, Worcester. Massachusetts, assignor to The Wire Goods Company, Worcester, Massachusetts. Filed May 4, 1918.

1,304,726. Stovepipe Holder and Brace. Homer A. Bailey, Elberta, Michigan. Filed April 19, 1918.

1,304,734. Safety Razor. John Bloom, Rockford Illinois. Filed June 26, 1918.

1,304,740. Baking Pan. Paul Carpenter, Glenview, Illinois. Filed October 4, 1915

1,304,806. Wire Fence Tightener. Robert R. Robbins, Florence, Kentucky. Filed February 28, 1918.

1,304,830. Wire Stretcher. Frank Wayman, Princeton, Missouri. Filed April 11, 1918.

1,304,876. Fishing Line Support. Ernst A. Heidtmann, Richmond Hill, N. Y. Filed February 9, 1917.

1,304,942. Rake. James P. Calnan, Southboro, Massachusetts. Filed September 14, 1917.

1,304,981. Drill. Frank O. Hoagland, Hartford, Connecticut, assignor to Pratt & Whitney Company, New York, New York. Filed January 19, 1918.

1,305,054. Animal Trap. General J. Blevins, Bremen, Ala. Filed April 12, 1916.

1,305,197. Garbage Pail Cover. Mary A. Dandrow, Ridgefield Park, New Jersey. Filed August 10, 1917.

1,305,223. Ash Shifter. William R. Kinread, Waverley, Massachusetts. Filed March 5, 1919.

1,305,321. Vise. Harold A. Tooker, Seneca, New Mexico. Filed August 7, 1918.

1,305,332. Safety Razor. Butler Ames, Lowell, Massachusetts. Filed August 16, 1917.

1,305,338. Door Bolt. Harold Blye, Grand Rapids, Michigan, assignor to National Brass Co., Grand Rapids, Michigan. Filed November 13, 1918.

1,305,339. Lemon and Lime Squeezer. Jack R. Bolton and John D. Williams, Sulphur Springs, and Felix L. Struve, Greenville, Texas. Filed October 16, 1918.

1,305,389. Ventilator. Claud P. Lyle, Atlanta, Georgia. Filed April 17, 1918.

1,305,395. Fruit-Stoner. Conrad Mink, Holgate, Ohio. Filed March 3, 1919.

1,305,496. Level. Wellington Salt, Buffalo, New York. Filed July 23, 1918.

1,305,504. Stovepipe Fastener. Charles F. Townsend, Onarga, Illinois. Filed February 2, 1918. Serial No. 215,114. Renewed April 16, 1919.

1,305,513. Hand-Tool. William A. Bernard, New Haven, Connecticut, assignor to The William Schollhorn Company, New Haven, Connecticut. Filed October 29, 1915.

1,305,550. Sash or Window Fastener. Emanuel Keuser, Sr., Palmyra, New Jersey. Filed February 18, 1919.

1,305,560. Hat and Clothes Hook. Daitake Okamoto, North Yakima, Washington. Filed January 13, 1919.

1,305,571. Automatically-Adjustable Wrench. Andrew Sporup, Eureka, California. Filed April 11, 1918.

1,305,602. Sharpening Tool. Louis Hermann, Chicago, Illinois. Filed October 28, 1916. Serial No. 128,153. Renewed April 28, 1919.

1,305,627. Collapsible Funnel. Wilbur Joe Smith, Coldwater, Kansas. Filed July 13, 1917.

1,305,647. Combination Stove Top and Water Heater for Gas and Vapor Stoves. William J. Elliott, Brooklyn, New York. Filed May 25, 1918.

1,305,676. Door-Stop. Henry G. Voight, New Britain, Connecticut, assignor to Sargent & Company, New Haven, Connecticut. Filed November 7, 1917.

1,305,688. Tool Handle Attaching Means. James F. Burke, Kansas City, Missouri. Filed July 30, 1918.

1,305,737. Hose Band. Charles G. Neiglick, Chicago, Illinois. Filed March 18, 1918. Serial No. 222,991. Renewed March 20, 1919.

1,305,746. Joint for Metallic Sash and the Like. Albert Rush, Columbus, Ohio. Filed July 17, 1915.

1,305,752. Crimping Tool. William F. Stone, Portland, Maine, assignor to National Metal Seal Corporation. Filed July 16, 1914.

1,305,777. Kitchen and Table Article. Albina J. Cunningham, Bridgewater, Massachusetts. Filed June 12, 1917.

1,305,806. Fruit Squeezing Tongs. George C. Keppeler, West Baden, Indiana, assignor of one-half to Theodore Dixon, West Baden, Indiana. Filed September 12, 1917.

WEEKLY REPORT OF TRADE AND THE MARKETS

NORMAL CONDITIONS AGAIN PREVAIL IN THE STEEL INDUSTRY.

For the first time since the signing of the armistice, normal conditions prevail in the steel industry. The price schedule adopted March 21 is practically unchanged and there is no indication that buyers are holding off in the expectation of lower prices. Buying is progressing along lines that indicate that consumers are filling their needs without consideration of prices. Operations are estimated at from 60 to 75 per cent of the increased capacity of the mills, and production practically equals pre-war production at approximtaely capacity operation. In character the buying is general. Structural steel is moving in a steadily increasing volume, while other products continue to show an expansion of demand.

Unfilled orders on the books of the leading interest for June are expected to show an increase for the first time since November. The second quarter will not make as good a showing in earnings, according to trade predictions, as the first quarter, notwithstanding the current improvement. May was the poorest month of the year, and the decrease in production in that month will offset any gains June will show. The big orders booked around the first of the month will be reflected in the forthcoming unfilled tonnage report of the principal producer. It was expected that the orders of the automobile companies, which were negotiated in May, would be shown in the unfilled tonnage report for that month, but the contracts were not signed until June 1 and the orders, therefore, went over until this month.

In fact, the automobile interests continued to take the bulk of the steel sold during the month, notwithstanding the increase from other sources. The demand for structural steel has been heavier in the West than in the East. Considerable construction work is in progress in the Chicago district, and other sections of the Middle West report activity. Revival of building nevertheless extended to the East during the last week and numerous small orders were reported from Atlantic coast cities.

Export activity is confined largely to inquiries. A fair volume of new business was reported booked for export account, including machinery, locomotives and railroad supplies, but the heavy buying expected from that quarter has not developed. Inactivity in the export business of steel is attributed to the uncertainty still attached to the form credits are to take. The trade believes that this question is nearer a solution. Developments of the week in this respect showed that the bankers and officials interested in the adoption of a nation-wide plan have attacked the problem in earnest, and this is considered an assurance that some workable plan will be forthcoming at an early date.

The request for a new statement of costs from the rail manufacturers made by the Trade Commission at the request of the Railroad Administration, is expected to develop little that is new. Costs have increased since the last statement was made, and the trade does not expect improvement until wages are readjusted. No new orders are anticipated as a result of the request for a statement of costs. The Railroad Administration is still in financial difficulties, and its resources will not permit extensive buying.

STEEL.

During the week reports were current in Chicago that steel prices would be advanced on the first of July. Already there have been some increases by individual companies and the expectation is that higher prices will rule for all steel products before the summer is over.

Increased demand from warehousemen and hardware dealers is reported in the steel trade. Hardware interests have already felt the increased demand for small steel products as the result of the revival of business, but report that they anticipate an even greater demand before the end of the summer. Many of them are stocking up in anticipation of this demand.

Manufacturers note a change in the source of the orders. Until recently the bulk of the business came from the West, but of late orders from New England and the South have reached heavy proportions, and the manufacturers feel assured that the fact denotes the safe passing of the period of uncertainty.

COPPER.

The copper market during the past week showed increased strength in anticipation of the conclusion of peace, and an early resumption of export demand. Producers are greatly satisfied with the progress in the position of the red metal, as accumulation has entirely stopped, and the present curtailed output is already taken up by the combined domestic and foreign demand. The copper export association is reporting a fair export business, the total recent purchases by Japan alone amounting to 10,000 tons.

A large demand from domestic consumers is still waiting to be placed, as buying so far has been on a hand to mouth basis, and the copper using trades are bare of any stock.

Sheet copper in Chicago firmly maintains its price at 25½ cents per pound, with no likelihood of any reduction.

TIN.

On Monday of this week the chairman of the subcommittee on pig tin of the American Iron and Steel Institute has announced to the trade that all the interallied tin has been sold and that all restrictions regard-

ing the resale of tin in the United States between consumers, dealers, jobbers and smelters have been removed by the War Industries Board. This brings to an end the restricted market on tin which has been in existence for over nine months, and opens the way to free trading.

The War Industries Board declared that licenses for the purchase of tin were no longer required, and that dating from August 1st import restrictions on pig tin and alloys containing tin would be removed when the product was shipped from countries of origin.

Meanwhile all importations of pig tin, tin ore, tin concentrates and metal alloys will be consigned to the American Iron and Steel Institute, which will function under the War Industries Board and War Trade Board until all import restrictions have been completely removed.

The opening of free trading in tin has so far not resulted in any greater activity, as consumers are covered for their urgent needs and are waiting to see the effect on the foreign markets. London answered on Tuesday with an advance of £3 15s in the Eastern price c. i. f. London, which was up to £239 15s. Trading at the New York Metal Exchange will commence on July 7 in two grades of tin. Class A will comprise Straits and Malacca tin and Class B will comprise all tin assaying not less than 99 per cent. The trading will be in 5 ton lots and 25 ton lots.

LEAD.

The firm tone in the lead market continues unchanged. Chicago prices for American pig at 5.65 cents and bar lead at 6.15 cents remain in force. Business is slowly improving and the prospects for increased production are encouraging.

SOLDER.

No changes have occurred in the solder market, prevailing prices in Chicago being as follows: Warranted, 50-50, per pound, 40.5 cents; Commercial, 45-55, per pound, 37.2 cents; Plumbers', per pound, 33.9 cents.

ZINC.

During the past few days nearly all of the independent sheet galvanizers have been in the market to buy zinc, and it can be said to be the first time this year that there has been a widespread demand from this branch of the industry. It continues to be reported that the trade in galvanized sheets is still unsatisfactory but the wholesale purchases of zinc would make it appear that an improvement in business was expected.

The brass trade has not participated in the buying but many of the principal plants were closed down on account of strikes last week and as labor conditions throughout this trade were generally unsettled it was not to be expected that there would be any demand from that quarter. However, the labor crisis seems to have been passed and several of the mills are starting up again with expectations of normal operations in the near future. Chicago prices of zinc in slabs have advanced from 7.25 cents to 7.75 cents per pound.

SHEETS.

A more diversified tonnage is reported in the market for sheets. Buyers are specifying in larger quantities than they have for many months, and as a result, old-time market activity is beginning to crop out. Those in close touch with the market state that business is decidedly encouraging and belief is expressed that short-time deliveries will be out of the question soon.

Automobile business still leads in activity, but there has been a notable gain in the specifications for black, galvanized, blue annealed and electrical sheets, especially the latter. One order of more than 2,000 tons of electrical sheets covering a year's requirements of a buyer, who before the war did not use more than 300 tons a year, recently was placed. Some shading in galvanized sheets still is going on but evidently it is not very general for the reason that companies here who are quoting full market prices are in receipt of steadily-enlarging specifications.

TIN PLATE.

Improvements are becoming noticeable in the condition of the tin plate market. Terne plate demands are increasing and there is much activity in tin mill black sheets, especially for export. Several thousand tons of black tin mill sheets recently have been sold for export to Japan where these sheets will be galvanized and tin used. Because of recent improvement in business, mill operations are better. Buyers show a willingness to contract provided they can obtain concessions but since a good quantity of business is coming out at present prices, few contracts, if any, have been closed under the market price. First quality bright tin plates I C, 14 x 20, per box of 112 sheets are selling at $13.20 in Chicago.

OLD METALS.

Wholesale quotations in the Chicago district which may be considered nominal, are as follows: Old steel axles, $23.00 to $24.00; old iron axles, $27.00 to $28.00; steel springs, $16.00 to $17.00; No. 1 wrought iron, $17.00 to $17.50; No. 1 cast, $20.50 to $21.00, all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 12½ cents; light brass, 7½ cents; lead, 4 cents; zinc, 4¼ cents; cast aluminum, 21 cents.

PIG IRON.

The week's inquiry and sales compare favorably with the preceding week, both in volume and radius, according to the report of Rogers Brown and Company of Cincinnati, Ohio. There is no mistaking the fact that buying is no longer of an incipient character but that it has spread to the wide dimensions of a general buying movement. In addition to heavy purchases of foundry iron, there have been large sales of malleable and silvery grades.

There is less disposition on the part of furnaces to sell for extended deliveries. Costs are continually climbing and they feel higher prices will be procured in the last quarter of the year.

Foundries, in general, report increased business, and operation at 100 per cent capacity in some lines is now only a question of a short time.

Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS.

PIG IRON.

Basic	$25 00
Northern Fdy., No. 2	26 75
Southern Fdy., No. 2	30 00
Lake Sup. Charcoal	31 45
Malleable	27 25

FIRST QUALITY BRIGHT TIN PLATES.

			Per box
IC	14x20	112 sheets	$13 20
IX	14x20		14 63
IXX	14x20		16 30
IXXX	14x20		17 50
IXXXX	14x20		18 70
IC	20x28		26 40
IX	20x28		29 25
IXX	20x28		32 60
IXXX	20x28		35 00
IXXXX	20x28		37 40

COKE PLATES.

Cokes, 180 lbs	20x28	$16 00
Cokes, 200 lbs	20x28	16 20
Cokes, 214 lbs	IC 20x28	16 60
Cokes, 270 lbs	IX 20x28	18 50

BLUE ANNEALED SHEETS.

No. 10 per 100 lbs.	$4 57
No. 12 per 100 lbs.	4 62
No. 14 per 100 lbs.	4 67
No. 16 per 100 lbs.	4 77

ONE PASS COLD ROLLED BLACK.

No. 18-20 per 100 lbs.	$5 17
No. 22-24 per 100 lbs.	5 22
No. 26 per 100 lbs.	5 27
No. 27 per 100 lbs.	5 32
No. 28 per 100 lbs.	5 37
No. 29 per 100 lbs.	5 42

GALVANIZED.

No. 16 per 100 lbs.	$5 9
No. 18-20 per 100 lbs.	6 1
No. 22-24 per 100 lbs.	6 7
No. 26 per 100 lbs.	6 42
No. 27 per 100 lbs.	6 57
No. 23 per 100 lbs.	6 72
No. 30 per 100 lbs.	7 22

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$7 30
No. 26 per 100 lbs.	7 35
No. 27 per 100 lbs.	7 40
No. 28 per 100 lbs.	7 50

SMOOTH SHEET STEEL.

	Per 100 lbs.
Wood's Smooth No. 20	$6 57
" " No. 22-24	6 62
" " No. 25-26	6 67
" " No. 27	6 72
" " No. 28	6 87

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, 100 lbs., base No. 28 ..... $11 55

BAR SOLDER.

Warranted, 50-50 per lb.	40.50
Commercial, 45-55 "	37.20
Plumbers' "	33.90

SPELTER.

In slabs 7½c

SHEET ZINC.

Cask lots	12c
Less than cask lots	12½ to 12½c

COPPER.

Copper Sheet, base 25½c

LEAD.

American Pig	$5 65
Bar	6 15

Sheet.

Full coils per 100 lbs.	$8 25
Cut coils per 100 lbs.	8 50

TIN.

Pig tin	76½c
Bar tin	78½c

HARDWARE.

ADZES.

Carpenters'.
Plumbs ..... Net

Coopers'.
Barton's ..... Net
White's ..... Net

Railroad.
Plumbs ..... Net

AMMUNITION.

Peters Cartridges.
Semi-Smokeless ..... Less 10-7½%
Smokeless ..... Less 10-7½%

Shells, Loaded, Peters.
Loaded with Black Powder. Less 15%
Loaded with Smokeless Powder, medium grades ..... Less 15%
Loaded with Smokeless Powder, high grade ..... Less 15%

Winchester.
Smokeless Repeater Grade .. 10&5%
Smokeless Leader Grade .... 10&5%
Black Powder ..... 10&5%

U. M. C.
Nitro Club ..... 10&5%
Arrow ..... 10&5%
New Club ..... 10&5%

Gun Wads—per 1000.

Winchester 7-8 gauge	$2 25
" 9-10 gauge	1 94
" 11-28 gauge	1 63

Powder.

	Each
DuPont's Sporting, kegs	$11 25
" " ½ kegs	5 90
" " ¼ kegs	3 10
DuPont's Canisters, 1-lb.	56
" " ½-lb.	32
" " ¼ lb.	22
" Smokeless, drums	43 50
" " kegs	22 00
" " ½ kegs	11 25
" " ¼-kegs	5 75
" " canisters	1 00
L. & R. Orange, Extra Sporting kegs	11 25
L. & R. Orange, Extra Sporting ½-kegs	5 90
L. & R. Orange, Extra Sporting ¼-kegs	3 10
L. & R. Orange, Extra Sporting 1 lb. canisters	56
L. & R. Orange, Extra Sporting ½ lb. canisters	32
L. & R. Orange, Extra Sporting ¼-lb. canisters	22
Hercules "E.C." and "Infallible", 50 can drums	43 50
Hercules "E. C.," kegs	22 50
Hercules "E. C.," ½-kegs	11 25
Hercules "Infallible," 25 can drums	22 00
Hercules "Infallible," 10 can drums	9 00
Hercules "E. C.," ¼-kegs	5 75
Hercules "E.C." and "Infallible" canisters	1 00
Hercules W. A. .30 Cal. Rifle, canisters	1 25
Hercules Lightning Rifle, canisters	1 25
Hercules Sharpshooter Rifle, canisters	1 25
Hercules Unique Rifle, canisters	1 50
Hercules Bullseye Revolver, canisters	1 00

ANVILS.

Trenton, 70 to 80 lbs. .... 9½c per lb.
Trenton, 81 to 150 lbs. .... 9½c per lb.

ASBESTOS.

Board and Paper, up to 1/16" 17c per lb.
Thicker ..... 18c per lb.

Broad.

Plumbs, West, Pat. List	
" Can. Pat.	$69 00
" Firemen's (handled), per doz.	21 00

Single Bitted (without handles).

	Prices
Warren Silver Steel	on application
Warren Blue Finished	"
Matchless Red Pole	$11 50

Double Bitted (without handles).
Warren's Natl. Blue, 3½ to 4½ lb. ..... Prices on application
The above prices on axes of 3 to 4 lbs. are the base prices.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$5 00	6 50	7 50	9 00

BALANCES, SPRING.

Pelouze 20%

BARS, CROW.

Pinch or Wedge Point, per cwt. ... $8 50

BASKETS.

Clothes.

Small Willow per doz.	15 00
Medium Willow "	17 00
Large Willow "	20 00

Galvanized Steel.

	½ bu.	1 bu.	1½ bu.
Per doz.	$11 50	$17 00	$22 00

AUGERS

Boring Machine 60%
Irwin's 25%
Carpenter's Nut 50%

Hollow.

Bonney's	per doz.	30 00
Stearns, No. 0	"	43 25
" No. 1	"	43 25
" No. 2	"	43 25
" No. 3	"	42 00
" No. 4	"	9 00
" No. 30	"	45 00
" No. 33	"	45 00
" No. 44	"	17 00
" No. 50	"	48 00
" No. 55	"	45 00
" No. 60	"	39 00

Post Hole.
Iwan's Post Hole and Well 25%
Vaughan's, 4 to 9-in. ... per doz. $13 00

Ship.
Ford's, with or without screw, Net list

AWLS.

Brad.

No. 3 Handled	per doz.	$0 65
No. 1050 Handled	"	1 40
Shouldered, assorted 1 to 4	per gro.	4 00
Patent asst'd, 1 to 4	"	85

Harness.

Common	"	1 05
Patent	"	1 00

Peg.

Shouldered	"	1 60
Patented	"	75

Scratch.
No. IS. socket hand'ld. per doz. 2 50
No. 344 Goodell-Pratt, List, less 35-40%
No. 7 Stanley " 2 25

AXES.

Boys' Handled.
Niagara 12 50

BEATERS.

Carpet.

	Per doz.
No. 7 Tinned Spring Wire	$1 10
No. 8 Spring Wire coppered	1 50
No. 9 Preston	1 75

Egg.

	Per doz.
No. 50 Imp. Dover	$1 10
No. 102 " " tinned	1 35
No. 150 " " hotel	2 10
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

Hand.

	8	9	10	12
Per doz.	$11 50	13 00	14 75	18 00

Moulders'.
12-inch ..... Per doz. 20 00

BELLS.

Call.
3-inch Nickeled Rotary Bell, Bronzed base ..... per doz. $5 50

Cow.
Kentucky 30%

Door.

	Per doz.
New Departure Automatic	$7 50
Rotary.	
3-in. Old Copper Bell	6 00
3-in. Old Copper Bell, fancy	8 00
3-in. Nickeled Steel Bell	6 00
3½-in. Nickeled Steel Bell	6 50

Hand.
Hand Bells, polished 15%
White Metal 15%
Nickel Plated 10%
Swiss 15%
Silver Chime 10%

Miscellaneous.
Church and School, steel alloys ... 30%

Farm, lbs.	40	50	75	100
Each	$3 00	3 75	5 50	7 25

BEVELS, TEE.

Stanley's rosewood handle, new list ..... Nets
Stanley's iron handle ..... Nets

BINDING CLOTH.

Zinced 55%
Brass 40%
Brass, plated 60%

BITS.

Auger.
Jennings Pattern 20%
Ford Car ..... List plus 5%
Ford's Ship ..... " " "
Irwin 35%
Russell Jennings 15%
Clark's Expansive 33⅓%
Steer's " Small list, $22 00 ..... 5%
" " Large " $26 00 ..... 5%
Irwin Car 35%
Ford's Ship Auger pattern Car ..... List plus 5%

Center 10%

Countersink.

No. 18 Wheeler's	per doz.	$2 25
No. 20 "	"	3 00
American Snailhead	"	1 75
" Rose "	"	2 00
" Flat	"	1 40
Mahew's Flat	"	1 60
" Snail	"	1 90

Dowel.
Russell Jennings 15%

Gimlet.
Standard Double Cut. Doz. $1 10—$1 60
Countersink ..... Doz. 1 80

Reamer.
Standard Square ..... Doz. 2 50
American Octagon ... " 2 50

Screw Driver.

No. 1 Common	"	1 40
No. 26 Stanley		1 75

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard, ¾ & 1¼-in.....Nets
Clock Spring..... "
Star..... "

Hack.
Atkins.....5%
Star.....Nets

Wood.
Disston
Nos..... 6 66 26
$8 00 $8 50 $8 00
Atkins
Nos..... 2 14 18
$3 85 $6 50 $4 75

BLOCKS.

Snatch.
Wooden.....Plus 10%

Tackle.
Iron Strapped.....Plus 10%

BOARDS.

Stove.
Wabash Crystal.....Net Prices
Wabash Oriental..... "
Wabash Mosaic..... "
Wabash Delft Enameled.. "
Wabash Art Inlay.....

Wash.
No. 760, Banner Globe, single) .....per doz. $5 25
No. 652, Banner Globe, (single) .....per doz. 6 75
No. 801, Brass King.. " 8 25
No. 860, Single—Plain Pump 6 25

BOBS, PLUMB.

No. 16, Stearns' Hexagon all steel.....per gross $50 00
No. 17, Stearns' Hexagon all steel..... 65 00

BOLTS.

Carriage, Machine, etc.
Carriage, ¾x6 and sizes smaller. and sh orter.....50-5%

Carriage, sizes larger and longer than ¾x6.....30-10%
Machine, ¾x4 and sizes smaller and shorter.....50-10-5%
Machine, sizes larger and longer than ¾x4.....40-5%
Stove.....75%
Tire.....60%

Mortise, Door.
Gem, iron..... 5%
Gem, bronze plated..... 5%

Barrel.
Cast.....Nets
Wrought..... "
Wrought, bronzed..... "

Flush.
Wrought..... "

Spring.
Wrought..... "
Wrought, heavy..... "

Square.
Wrought..... "

BORERS.

Angular.
Miller's Falls.....per doz. $23 00
Sill borers, No. 51... " 34 00
" " 52... " 39 50

Bung. Doz.
Enterprise Mfg. Co.'s No. 1....10%
" " " No. 2....10%

BOXES.

Mail, No..... 2 4 10
Per doz.....$18 00 23 00 29 00

Mitre.
Stanley's.....Net Prices
Stearns, No. 2.....per doz. $48 00

BRACES.

Fray's Genuine Spofford's..20&10%
" No. 08.....$7 50
" No. 010..... 8 00

BRACKETS.

Hay Rack.
Wenzelmann's No. 1, per doz. sets.....$18 00
Wenzelmann's No. 2, per doz. sets..... 19 20

Shelf.
Wrought Steel.....40%

Well.
Oak, Wrought Iron Riveted Top Ears.....per doz. $8 00

BURRS, RIVETING.
Copper Burrs only.....25% above list
Tinners' Iron Burrs only.....30%

BUTTS.

Cast Iron.....7½%
Wrought Brass (New List).....Plus 5%
Wrought Steel, Bright.....40%
Wrought Steel, Japanned....Net prices

CALIPERS.

Double.....Nets
Inside and Outside..... "
Wing..... "

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$7 00

Toe.
Blunt and medium, 1 prong, per 100 lbs.....$6 00
Sharp, 1 prong, per 100 lbs.... 6 50

CANS.

Milk.
Elgin.
Gals..... 5 8 10
Each.....$4 00 $5 15 $5 15
Iowa Pattern.
Gals..... 5 8 10
Each.....$4 00 $5 15 $5 15

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular....each, Nets
Diamond, Sling..... " "

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%

Bed.....55%

Common Plate.
Brass Wheel.....15%
Iron and porcelain wheels, new list.....50%
Philadelphia Plate, new list....50%
Martin's.....40%

CATCHERS, GRASS.

No. 160S, per doz.....$12 25
No. 165S, " 14 01

CEMENT, FURNACE.

American Seal, 5 lb. cans, net $0 45
" " 10 lb. cans, " 90
" " 25 lb. cans, " 1 87
Pecora, 5 lb. cans..... " 45
" 10 lb. cans ..... " 90
" 25 lb. cans..... " 1 87

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $8 50
With Covert Snaps " 5 80
With Slide..... " 5 00
Without Slide.... " 4 60

Cable Coil Chains
Inch..... ½ 1 1¼
Per 100 lbs.....7 75 7 50 7 50

Picture Chains.
Light Brass, 3 ft.....per doz. $1 25
Heavy Brass, 3 ft.... " 1 75

Safety Chain.
Brass..... 5%

Sash Chain. (*Morton's Steel*, per 100 ft.
0..... $2 50
2..... 3 10
1..... 3 60

Champion Metal.
0R..... 5 40
2R..... 5 60
1R..... 7 75

Champion Metal.–Extra Heavy.
1H..... 9 50

Cable Sash Chains.
Steel.....List Net Plus 15%

CHALK, CARPENTERS'

Blue.....per gro., $1 50
Red..... " 1 50
White..... " 1 45
Common White School Crayon..... " 25c

CHARCOAL.

In bags.....per bag $1.70

CHECKS, DOOR.

Blount.....Net list
Corbin.....

CHIMNEY TOPS.

Iwan's Volcano.....40%

CHISELS.

Box.
Inches..... 12 14
Round, per doz.....$5 25 $ 5 75
Flat, per doz..... 7 25 8 25

Cold.
Good quality, ½ in. and larger.....per lb. 28c
Smaller size, per doz.....Nets

Socket, Firmer.
Ohio.....Price on Application

Socket, Framing.
Ohio..... Price on Application

Tanged, Firmer.—Barton's.
With handles.....Net list

Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers..... List less 35-40%
Yankee, for Yankee Screw Drivers..... 6 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3 90 4 60 4 85
Belle, Barrel.....65&7½%

Common Dash,
Gal..... 5 7
Per doz..... 17 00 19 00

CLAMPS.

Adjustable
Martin's.....30%
No. 63, Screw...List price plus 25%

Cabinet.
Screw.....List price plus 25%

Carpenters'.
Steel Bar.....List price plus 10%

Carriage Makers'.
No. 61, Malleable Iron Screw, ...List price plus 25%

Quilt Frame.
No. 30 Ball and Socket, 2½" head.....per gross $8 75
No. 50, Ball and Socket, 3½" head.....per gross 10 25

Hose.
Sherman's, brass, ½-in., per doz..48c
Double, brass, ½-in., " 1 20

Saw Filers.
Wentworth's, No. 1, $12.50; No. 2, $18.25. No. 3, $16.25.

CLAWS, TACK.

Wood hdl. No. 10.....per doz. $0 95
Forged steel, wood hdle. " $1 75
Solid steel..... " 2 40
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....40%
Iwan's Stationary 30%

Pot.
Wire.....per doz. $0 75

Side-Walk.
Steel.....per doz., Net prices

CLEAVERS.

Family.
Beatty's, inch 7 8 9 10
Per doz..$27 00 29 00 33 00 36 00

CLEVISES.

Malleable.....10c lb

CLIPPERS.

Bolt.....$2 25&6 00

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 70c
Troy ..... " 38c

Hame ..... " 50c

CLOTH.

Emery.
Star .....New Prices
B. & A..... " "

Hardware Wire— Prices on application
Full rolls (100 ft.)
12 Mesh, galvanized.... "
14 " " .... "
16 " " .... "
18 " " .... "

Screen Wire. Prices on application.
12 mesh, painted, per 100 sq. ft... ....

COLLARS, STOVE PIPE.

Lacquered.
Inches 5 6 7
Fancy pattern, per doz..... 80c 85c $1 15

COMPASSES.

Carpenters'.....13%

COPPER—See Metals.

COPPERS—Soldering.

3 lb. and heavier.....per lb. 55c
2½ lb..... " 56c
2 lb..... " 57c
1½ lb..... " 58c
1 lb.....

CORD.

Picture.
White Wire.....70&10%

Sash.
Sampson Spot, No. 7, per doz. $21.35
Revenoc No. 7.....per doz. $14.40

CORKSCREWS.

Walker's.....30%
Williamson's Regular.....35&11%
Williamson's Forged Worm.....40%

COTTERS, SPRING.

All sizes (new list).....80%

COUPLINGS, HOSE.

Brass.....per doz. $2 25

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine ..per doz. $16 00

CRAYONS—See Chalk.

CROWBARS.

Pinch or Wedge Point.....per lb. 8c

CUTTERS

Glass.
Woodward.....40%

Meat.
Enterprise—Nos. 5 10 12
Each $2 50 $4 25 $3 75
Nos. 22 32
" 6 50 8 50

Pipe.
Saunders', No. 1 2 3
Each.....$1 85 2 75 6 75

Slaw and Kraut. Per doz.
4-knife Kraut.....$20 00-55 00
3-knife Kraut, 8x27 in.. 13 00-18 00
1-knife Slaw..... 2 50
2-knife Slaw..... 3 00
Washer..... 11 00

DAMPERS, STOVE PIPE.

Ideal
3".....$1 00
4".....1 05
5".....1 15
6".....1 25
7".....2 20
8".....3 75
10".....6 00

DIES AND STOCKS.

Discount.....New List

DIGGERS.

Post Hole.
Eureka.....per doz. $14 50
Iwan's Split Handle (Eureka)
4-ft. Handle.....per doz.. 14 00
7-ft. " " 20 00
Iwan's Perfection (Atlas) " 16 00
Iwan's Hercules pattern " 16 15
See also Augers—Post Hole.

Dividers, Wing.....25%

DOOR CHECKS—See Checks.

DOORS, SCREEN.

1-in. 4-panel, painted.....Net Prices
1½-in. 4-panel, painted..... "
1½-in. 3-panel, natural pine, fancy..... "

DOOR HANGERS—See Hangers.

DRILLS.

Blacksmiths' Twist. (New List)....40%

Breast.
Millers Falls No. 12....Each, $46 00
" " " 112.... " 26 00

Hand.
Goodell's Automatic.
Nos. 01 03
Per doz. 12 00 14 40
Goodell's Single Gear, per doz. 15 75
Goodell-Pratt No. 4½ per doz. list, less.....35-40%
Goodell-Pratt No. 379 per doz. list, less.....35-40%

Reciprocating.
Goodell's.....per doz. 26 00

DRIVERS, SCREW.

Standard..... Nets
Lock Ferrule..... "
Champion..... "
Champion Pattern..... "
Clark's Interchangeable..... "
Edison..... "
Reed's Lightning..... "
Goodell's Spiral..... "
Yankee Ratchet..... "
" Spiral..... "

EAVES, TROUGH.

60% off Standard List.

ELBOWS—Stove Pipe.

1-piece Corrugated, Uniform.
Doz.
5-inch.....$1 40
6-inch..... 1 50
7-inch..... 1 90

Uniform, Color Adjustable
Doz.
5-inch.....$1 35
6-inch..... 1 45
7-inch..... 1 80

ELBOWS—Conductor Pipe.

Galvanized Steel, Tin and Terne, Round Corrugated.

Size.	Doz.
2-inch	$ 3 60
3-inch	4 32
4-inch	7 20
5-inch	15 00
6-inch	18 00

Subject to 60% discount.

EMERY, TURKISH.

Size	5-lb pkgs.	½ kegs.	kegs.
Flour	15c	8c	7½c

EYES.

Bright Wire Screw—See Ooods, B. W.
Drifting Pick.....60, 10&5%

Hooks and Eyes—
Brass, 1½" No. 60..per gross, $3 50
Iron " " 50.. " 1 60

FASTENERS, STORM SASH.

Shroeder's.....per doz. $1 50
Sensible..... " 3 00

FILES AND RASPS.

Delta
Delta.....30%
Swiss.....List plus 25%
Utility..... " net.

Nicholson's—
American.....50&2½%
Arcade.....50&2½%
Black Diamond..... 40%
Eagle.....50&2½%
Great Western.....50&2½%
Kearney & Foot.....50&2½%
McClellan.....50&2½%
Nicholson..... 40%
J. Barton Smith.....50&2½%
X-F Swiss Pattern....List plus 10%

Simonds'.....50%
Disston's.....50&2½%
Heller's.....60&10%

FORKS.

Barley.
Steel, new list.....New Prices

Hay.
2-tine.....New prices
3- " .....New prices
4- " .....New prices
Digging.....New prices
Scoop.....New prices

Header.
3-tine.....New prices
4- " .....New prices

Manure
4-tine.....New prices

FREEZERS—ICE CREAM.

White Mountain	1-quart	....	@	Prices on application
" "	2 "	....	@	
" "	4 "	....	@	
" "	6 "	....	@	
Arctic	1 "	....	@	
"	2 "	....	@	
"	4 "	....	@	
"	6 "	....	@	

GAUGES.

Cream Pail.
Fairmount.....per doz. $3 75

Marking, Mortise, etc.....
.....Nets

Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLUE.

Bulk.
B Amber.....per lb. 35c
A White..... " 40c
H. S. Amber..... " 32c

Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GREASE, AXLE.

Wood Boxes.
Frazer's.....per gro. $13 00
Hub Lightning..... 7 50

Wood Pails.
Frazer's, 15lb.$1.00; 25 lb. $1.50 each
Hub Lightning, 15 lb. 90c; 25 lb. $1.21 each.

Tin Cans.
Frazer's
1½lb. per doz.....$1 75
3 lb. per doz..... 3 25

GRINDSTONES.

Family.

Inches..	7	8	10	12
Per doz..	20 50	21 75	26 25	30 50

Loose.
Per ton..... Price on application

Mounted.
Ball Bearing..... 1 2 3
Each.....$4 75 5 00 5 25

GUN WADS.

(See Ammunition).

GUNS.

Iver Johnson Champion Single Barrel Shot Guns.....Net Prices
Double Barrel, Hammerless. "

HAFTS, AWL.

Brad.
Common.....per doz. $0 35

Peg.
Patent, plain top..... " 80
Patent, leather top... " 90

Sewing.
Common..... " 24
Patent..... " 55

HAMMERS, HANDLED.

per doz., net
Blacksmiths, Hand, No. 0, 26 oz.$11 11
Engineers', No. 1, 26 oz..... 11 11
Farriers', No. 6, 7 oz..... 7 23
Machinists', No. 1, 7 oz..... 6 65

Nail.
Vanadium, No. 41½, 16 oz., per doz.....$12 00
V. & B., No. 11½, 16 oz. per doz. 10 00
Garden City, No. 101½, 16 oz., per doz..... 9 00

Tinner's Riveting, No. 1, 8 oz., per doz..... 8 00

Shoe, Steel, No. 1, 13 oz. per doz. 6 88

Tack.
Magnetic.
Per doz..... $5 63

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....50%
5 lbs. and over.....50&10%

Masons.
Single and Double Face.....50%

HANDLES.

Auger.
Common Assorted....per doz. $0 75
Pratt's Adjustable, Nos. 1 & 2, per doz..... 6 00
Ives' Adjustable.....per set, 1 35

Axe.....30%

Chisel.
Hickory, Tanged, Firmer, Assorted, 55c; Large, 85c per doz.
Hickory, Socket Firmer, Assorted, 70c; Large size, 80c per doz.

Coal Pick.....40%
Drifting Pick.....40%
File, assorted, 30c; Large, 35c per doz.

Hammer.
Adze Eye.....per doz. 40 to $1 00
Blacksmiths'... " 45c@1 00
Machinists'.... " 50c@1 00

Hay and Manure Fork.....25%

Screw Driver.
Assorted..... " 60
Large..... " 90

Shovel and Spade.....25%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....12½%
Matchless.....12½%
Warehouse Tandem, No. 44...33⅓%

Conductor P.
Iwan's Perfection.....50%

Eave Trough.
All sizes 5" or smaller, ...per gross. $3 80 Net
All sizes, larger than 5", ...per gross. 5 00 "

Garage Door.
Right Angle.....50&10%
Sliding Folding.....50%
Receding.....50%

Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 3 40
Lane's Standard..... " 3 50
Lane's New Model... " 3 10
Le Roy Noiseless.....40&10%
Richards.....25%
Advance.....40&10%

HASPS.

Hinge, Wrought..... Add 50% to list.
With Staples—See Staples.

HATCHETS.

Crescent.....50%
Cast Claw.....per doz. $1 50@1 85
Cast Shingling... " 1 50@1 85
Germantown.....7½%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS

Wenzleman's No.1 per doz. sets, $18 00
Wenzleman's No. 2 " " 19 20

HINGES.

Blind.
Clark's Gravity
No. 1.....per doz. sets, $2 25
No. 3..... " " " 5 75

Gate.

Clark's.....	1	2	3
Hgs & Ltch, doz.	$5 50	7 00	9 75
Hinges only "	4 75	5 50	8 00
Latches only.	1 90	1 90	....

Screen Door.
Cast Iron.....gross $10 00
Steel..... " 7 00

Spring.
Chicago.....Add 12½% to list.
Columbia Dbl. Acting...40&10&5%
Gem.....25%
Ideal Detachable...per gro. $11 00
Matchless.....40%
New Idea.....per gro. $7 20
Oxford.....20%

Wrought Iron.
New Lists.....
Light Strap Hinges.....15%
Heavy Strap Hinges.....25&5%
Light T Hinges.....15&5%
Heavy T Hinges.....20&5%
Extra Heavy T Hinges.....25%

Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $7 75
14 to 20 in..... " " 7 50
22 to 36 in..... " " 7 25

Screw Hook and Eye.
¾ in.....per doz. pair $2 60
⅝ in..... " " 3 50
½ in..... " " 5 00

HOES.

Garden .....Net

Grub.
Extra.....New prices
Hazel.....per doz. New prices
Ladies' and Boys'.....New prices
Mortar.....New prices
Planter's Eye.....New prices
Weed.....New prices

HOOKS.

Awning. No. 60.....per gro. 50%

Belt.
Brown's.....70&5%
Jones'.....65&5%

Bench.
See Stops, Bench.

Box.
Inch..... 5 7 10 12
Per doz...$2 50 2 75 3 25 3 85

Bush.
Common Axe Handle, per doz.$22 00

Chain.
Inch.. 1/4&5/16 3/8 7/16 1/2
Pr 100 $7 60–8 10 9 75 11 50 12 60

Clothes Line.
Japanned.....per doz.48c@1 40
Galvanized..... " 75c@2 50

Coat and Hat.
Common Wire....per gro. 1 25-1 65

Conductor.
Iwan's Tinned Sickle.....10%

Corn.
Common, riveted, painted
red.....per doz. Nets
Little Giant..... " "

Gate.
See Goods, Bright Wire.

Grass.
Common Nos. 1 3 5 7
Per doz...$4 50 3 30 3 75 3 25

Hammock.
With plate.....per doz. 1 10
With screw..... " 1 00

Lambrequin, or Drapery. per gro...30c
Picture.....50%@50&10%
Potato and Manure.....Nets
Screw.
Brass.....70%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOSE, GARDEN.

Coupled, per ft.
Velvet, 3 ply-¾" guar. press.. 14c
Eclipse " " " 17½c
Diamond " " " 21c

COTTON COV. RUBBER HOSE.

High Grade Apache 1" guar. press.
400 lbs.....40c

HUSKERS.

Boss.
Nos..... B E
Per doz.....New Nets
No. 59.....per doz. New Nets

IRON, PIG.

See Metals.—First column.

IRONS.

Curling.
C.....per doz. $4 40
B..... " 50
A..... " 58
Princess..... " 1 25
Thelma..... " 1 25
Pinking..... " 1 00

Plane.
Wood Bench.....Add 10% to list

Sad.
Charcoal.....per doz. $11 00
Common, polished, per 100 lbs. 7 75
No. 70 Asbestos.....$1 50 net
No. 100 " ..... 1 75 net
Common, nickel plated..... 8 25
Mrs. Pott's,
No. 50 J. Enterprise, per set, Nets
No. 55 J. " " "
No. 50 T. " " "
No. 55 T. " " "
Tailors' Sad.....per lb "
Tailors' Goose..... " "

Ideal.
6 lb. Household.....$3 50
9 lb. Dressmakers'..... 4 25
14 lb. Tailors' Goose..... 5 50

Tuyere.
Single Duck Nest....per doz. $5 25
Double Duck Nest... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive.....30&10%

Wagon.
Richard's No. 1.....per doz. $15 50
Miller..... 20 00
Oliver,
Nos..... 0 00
Each.....$0 60 $0 80

Standard.
Nos..... 1 2
Each.....$0 60 1 00
R-W
Big Lift.....40%
Tiger.....40%

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper.....per lb. 27
Maslin.....40&10%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California..... 3 40
Butcher. Per doz.
Handles, 6" blade.....$3 25
" 7" " 3 75
Beechwood handles, 9" blade.. 4 50
" " 10" " 5 25
Cooper's Hoop.....15%

Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25

Drawing.
Standard.....(New List)...15%
Adjustable.....15%
Barton's Carpenters'.....15%

Hay.
Iwan's Solid Socket.....doz.$13 00
Heath's..... " 13 00
Iwan's, Sickle Edge..... " 15 50
Iwan's, Impv'd Serrated. " 15 75

Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75

Mincing.
Common, Single..... " 60
Common, Double.... " 90
Streeter, 4-blade..... " 1 30
Streeter, 6-blade..... " 2 00

Putty.
Common.....per doz. $0 75@1 50
Lander's..... " 1 75@2 50

Scraping.
Beech Handle..... 90@1 10
Lander's..... 5 50@6 50

KNOBS.

Doors.
Mineral.....per doz. $2 10
Porcelain..... " 2 20
Jet..... " 2 20

LADDERS.

Common Long.
Per ft.....17c@23c
Extension.
Per ft..... 22 to 28
Step.
Common, per ft.....23c
Common, with Shelf, add 10c.
IXL.....34c
Challenge, 6 to 9 ft.....55c
10 to 16 ft.....60c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light...per doz. $13 00

LEADERS, CATTLE.

Nos..... 51 52
Per doz.....$1 35 1 45

LEATHER, LACE.

Cut.....50%
Sides.
Ex. Quality.....per sq. ft. $0 45

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. $3 25@5 50
Alaska..... " 8 00
Alaska..... " 10 00
Transom.
Payson's.....55%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos. 4 6 7 8 9
Gro.....Prices on Application
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....Prices on Application
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....Prices on Application
Mason's..... " " "
Clothes.
60 ft. Jute.....per doz. $0 95
60-ft. Sisal..... " 40
50-ft. Cotton..... " 15
50-ft. Braided Cotton " 25

LINING, STOVE.

Bricks.....per crate, 42c

LOCKS.

Barn Door.
No. 60 Stearns.....per doz. $9 00
No. 80 " ..... " 17 50

MACHINES.

Boring. Without Augers With Augers
Angular...per doz. $3 00 4 40
Upright... " 2 60 4 00
Riveting.
Stearns No. 1.....per doz. $12 00
Tenoning.
No. 50 Peace's Spoke...each $10 75

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, No. 2, per doz. $16 50
" No. 3 " 19 50
" No. 4 " 28 50
Round Hickory..... " $3 00– 5 00
" Lignumvitæ.. " 6 25–10 50
Square Hickory..... " 3 50–5 50
" Lignumvitæ.. " 8 00–12 00
Tinners'.
Hickory..... " 2 25

MATS.

Door.
National Rigid.....50&10&5%
Acme Steel Flexible.....50%
Stove.
No. 2.....per gro. Nets
No. 1..... " "
No. 1 Asbestos Toasters, or
wire-covered Stove Mats,
with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with
ring..... per doz .. 60

MATTOCKS.

Plumbs.....25%

MAULS.

Iron, lbs.... 10 13 16 18
Per doz.....Prices on Application
Wood Face, lbs.... 10 12 14
Per doz.....Prices on Application
Wood Choppers'.
Lake Super'r & Oregon Pat. 40&5%

MEASURES.

Galvanized, doz .....Nets
Japanned, doz.....Nets

MILLS, COFFEE.

Enterprise.....16⅔%
Parker.....50&5%
Arcade.....40-10%

MITRE BOXES.

See Boxes.

MOPS.

Cotton. Star (Cut Ends).
Pounds 12' 15' 18' 24'-3 oz.
Per doz. $4 50 5 65 6 75 9 00

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each.....$6 50 7 25 8 00
King Universal—B. B.
Each.....$5 25 5 75 6 00
Inches..... 14 16 18
Big Giant.....$3 50 3 90 4 25
Stearns'.
No. 1—12 in.....each $6 75
14 in..... " 7 00
16 in..... " 7 25
18 in..... " 7 50
No. 2—10 in..... " 7 75
12 in..... " 8 25
14 in..... " 8 75
16 in..... " 9 25
18 in..... " 10 00
20 in..... " 10 75
No. 3—10 in..... " 8 00
12 in..... " 8 50
14 in..... " 9 00
16 in..... " 9 50
18 in..... " 10 25
20 in..... " 11 20

NAILS.

Cut Steel.....Prices on Application
Cut Iron..... " " "
Wire.
Small Lots....Prices on Application
Cement Coated.
Small Lots....Prices on Application
Horseshoe.
Ausable..... 55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....30&5%
Picture.
Brass Heads 25%
Brads.....50&5%
Furniture.....List plus 15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before weaving....40&10%
Galvanized after weaving.....40%

NIPPERS.

End Cutting.
Stubb's Pattern, Inches. 5 6
Per dozen.....$4 65 6 75
End and Diagonal Cutting.
Swedish Side. Inches.. 5 6
Per dozen.....$4 50 5 75
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Magic.....per doz. $9 50
Diamond..... " 5 75

NUTS, HOT PRESSED.

Square Tapped.
$1.05 off per 100 lbs.
Hexagon Tapped.
85c off per 100 lbs.

OILERS

Chase Pattern.
Brass and Copper.....25-10%
Zinc.....35%
Engineers'.
Tin.....per doz. $7 00@ 9 00
Machine.
Common.....per doz. $0 85

OPENERS.

Box.
See Box Chisels
Can.
Delmonico.....per doz. $1 30
Never Slip..... " 65
Crate.
V. & B..... " 7 25-11 00

Stove. Per 100 Joints
29-Gauge, 3-inch.....$15 50
" 4-inch..... 16 50
" 5-inch..... 17 70
" 6-inch..... 18 75
" 7-inch..... 21 20

T-Joint, Made-up.
6-inch.....per 100 $31 00

Furnace Pipe.
Double Wall Pipe and Fittings 33⅓%
Single Wall Pipe, Round Pipe
Fittings.....33⅓%
Galvan'd and Black Iron Pipe,
Shoes, etc.....30%

PLANES.

Stanley Iron Bench.....net

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—Nets
Cutting.
Bernard's.....New Prices
Lodi.....New Prices
Paragon.....New Prices
Fencing.
Black Bull.....All Nets
Farmers' Choice.....All Nets
Russell's.....All Nets
Flat and Round Nose.
Bernard's.....New Prices
Lodi.....New Prices
Paragon.....New Prices

Gas.—Inches 7 8 10 12 14
Per doz. 5 00 5 50 7 00 8 00 10 00

PARERS.

Apple.
Goodell's.....per doz. $10 80
Turntable..... " 11 40
White Mountain.... " 8 40
Reading, No. 78.... " 11 40

Potato.
Goodsell's Saratoga, 10½ in., dz. 6 50
Goodsell's Saratoga, 5 in., dz. 5 50

PICKS.

Adze Eye Ore.....22½%
Drifting and Poll Picks.....22½%
Plumbs, Railroad.....22½%
Surface.....22½%

PINCERS.

Carpenters', cast steel.
Inches.... 6 8 10 12
Per doz...$3 75 4 75 6 25 7 00
Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common....per box of 5 gro. $0 95

Picket
Fluted, 15-in.....per doz. $1 10
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.
Standard Gauge Conductor Pipe, plain or corrugated.

Not Nested.....45&5% off
Nested solid .....50% off

L. C. L. to Dealers:—
Terms 60 days; 2% Cash 10 days.

Factory shipments generally delivered.

OUTFITS, COBBLING

Combination.....per doz.$16 00
Economy..... " 8 50
Family..... " 14 50

PAILS.

Cream.
14-qt., without gauge,per doz. $9 50
18-qt., " " " 11 00
20-qt., " " " 11 75

Sap.
10-qt., IC Tin.....per doz. $4 00
12 " " ..... " 5 50

Stock.
Galv'd. qts. 14 16 18 20
Per doz...$9 75 10 75 12 75 14 50

Water.
Galvanized, qts.. 10 12 14
Per doz.....$5 75 6 50 7 25

Wood.
Cable, 2-Hoop.....per doz. Nets
Cable, 3-Hoop..... " Nets
Cedar, 3-Hoop,brass.. " Nets

PANS.

Dripping.....Net

Fry.
Common.....Nets
Acme..... "

Roasting.
Paxton,
Nos.... 1 2 3 4
Per doz.....Nets
Neverburn..... "

Savory No. 200.....per doz. $8 40

PAPER.

Building.
Plain.....per 100 lbs.
Tarred..... "
Tarred Felt..... "
Prices on Application
Red Rosin, 20-lb.....per roll 72c
Red Rosin, 25-lb..... " 90c
Red Rosin, 30-lb..... " $1 08

Sand and Emery.
No. 1, per ream, best grade.... $5 40
No. 1, per ream, cheaper grade. 4 85

Wrapping.
Express.....100 lbs. Nets

Tinners'.
Hollow.....Net list
Solid.....each, 10c

PLUMBS AND LEVELS.

Common.....Nets
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTERS, SPOKE.

Stearns' No. 1.....per doz. $7 25
" No. 2..... " 9 25

POKERS, STOVE.

Wr't Steel, str't or bent per doz. $0 75
Nickel Plated, coil hanl's " 1 10

POLISH.

Burneshine.
¼-pint.....doz. $1 10
½-pint..... " 1 50
1-pint..... " 2 60
1-quart..... " 5 00
½-gal..... " 9 00
1-gal..... " 15 00

Metal.
Wizard, 6 oz.....per gross $17 40
" ½ pt..... " " 19 20
" 1 pt..... " " 36 00
" 1 qt..... " doz. 5 40
" ½ gal..... " " 9 60
" 1 gal..... " " 15 60

Stove.
Black Eagle Paste, 1-lb. cans, per gross..... $30 00
Black Eagle Paste, 5-lb. cans, per case..... 4 90
Black Jack Paste, #10, 8 oz., per gross..... 11 40
Black Eagle Liquid, 6 oz., per gross..... 13 20

FIRE POTS.

Clayton & Lambert's, each $4 00@6 00
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%

PRIMERS.

See Amunition.

PRUNERS.

Disston's Pole.....per doz. $18 00
Water's Improved..... " 60%

PULLERS.

Cork.
Daisy.....each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....per doz. 14 50
Never-Slip..... " 17 00

PULLEYS.

Awning—Jap'd.....10%

Clothes Line.....10%

Hay Fork.
Iron Wheel, 5-in.....per doz. 2 50
Wood Wheel, 6-in.... " 2 65
Wood Wheel, 6-in., pass knot, ...per doz. 3 00

Sash.
Common .....Net
Common-Sense, 2-in. .....Net
Empire Pattern, 2-in.....Net
Ideal .....Net
Steel .....Net

PUMPS.

Pitcher Spout.
Nos..... 1 2 3 4
Each.....Nets

Spray.
Midget Junior..... per doz. 3 75
New Misty ..... " 6 00
Crescent ..... " 6 50

PUNCHES.

Conductors.
No. 22.....per doz. $3 00
Machine.....per lb. 25

Saddlers'.
Common.....per doz. 1 50 to 5 60

Revolving Spring.
Stearns, No. 10.....per doz. $4 80
" No. 40..... " 9 50
" No. 60..... " 12 80

PUTTY.

Strictly pure.....per 100 lbs. $4 25

RAIL.

Barn Door.
Matchless, 1-in..... 5c
Matchless, 1½-in..... 7c
Storm King..... 5c

Sliding Door.
Bronzed wrought iron...per ft. 8½c

RAKES.

Garden. Per doz.
Steel, Bow, 12-inch Teeth.... $8 50
Steel, Bow, 14-inch " 9 25
Malleable Iron, 12-in. " 4 75
Malleable Iron, 14-in. " 5 00

Hay.
Wood, 10 Teeth $4 00

Lawn.
20 Teeth .....per doz. $5 50

RASPS—See Files.

RAZORS—SAFETY.

Gillette.....per doz.$45 00
Auto Strop..... " 45 00
Gem..... " 8 40
Gem (3 doz. lots)..... " 8 00
Ever Ready..... " 8 40
Ever Ready (3 doz. lots) " 8 00

RAZOR STROPS.

Star (Honing).....50%

REGISTERS.

Japanned, Bronzed & Plated.....40%
Solid Brass or Bronze Metal..Net list plus.....Prices on application
Baseboard.....40%

REGISTER FACES.

Japanned, Bronzed and Plated.
4x6 to 14x14.....40%
14x14 to 38x42.....60%

REVOLVERS.

Iver Johnson Satety Automatic Hammer..... New Nets
Hammerless..... "
I. J. Model 1900..... "

RINGS AND RINGERS.

Bull.
Copper.....2½-in. 3-in.
Per doz.....$2 75 $3 25
Rea's Improved Self-Piercing copper, doz. 3 40
Steel, per doz..... 1 50 1 80

Hog.
Blair's Rings.....per doz. $ 75
Blair's Ringers..... " 1 00
Brown's Rings..... " 72
Brown's Ringers..... " 1 00
Hill's Ringers..... " 1 00
Hill's Ring, boxes.... " 72
Major Rings..... " 60
Perfect Ringers..... " 1 50
Wolverine Rings..... " 1 65
Wolverine Ringers... " 1 10

Fruit Jar.
White.....per lb.....30c

Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 40

RIVETS.

Copper Belt.....Add 15% to list
Coppered Iron.....30%
Tinners'.....30%
Hame.....per lb. $0 17
Slotted Clinch.....per doz. 60c@1 10
Tubular.
Nos. 1 and 2 assorted sizes, 50 in box.....doz. 75c
Nos. 1 and 2 assorted sizes, 10 in box.....doz. 1 40

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com. on reels.per lb. Market
¼, 5-16 in. Com. in coils. " Price

Sisal.
1st Quality.....23½c
No. 2.....20½c

Pure Manila.
1st quality, base.....per lb. 27½c
Hardware Grade..... " 26½c

RULES.

Hickory Board.....20%
Log.....20%

SAWS.

Band.
E. C. Atkins & Co. Prices on applic'n

Buck.
Disston's ..... New nets
Jackson's ..... New nets

Butchers'.
E. C. Atkins & Co. Prices on applic'n
Disston's ..... New nets

Circular.
E. C. Atkins & Co. Prices on applic'n
Disston's..... New nets
Hiles' ..... New nets
Simonds' ..... New nets

Compass.
E. C. Atkins & Co. Prices on applic'n
Common ..... New nets
Disston's..... New nets

Cross-Cut.
E. C. Atkins & Co. Prices on applic'n
Disston's ..... New nets
Simonds'..... New nets

Dehorning.
Disston's ..... New nets

Hack.
Disston's ..... New nets
Simonds', Box Lots..... New nets
Star..... New nets

Hand and Rip.
E. C. Atkins & Co. Prices on applic'n
Disston's No. 7 ..... New nets
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120..... New nets
Keystone..... New nets

Keyhole.
Disston's ..... New nets

Miter Box.
E. C. Atkins & Co. Prices on applic'n

Narrow Band.
Simonds' ..... New nets

Panel.
E. C. Atkins & Co. Prices on applic'n
Disston's No. 7 ..... New nets

Pruning.
Disston's ..... New nets

Rift.
Simonds' ..... New nets

Wood.
E. C. Atkins & Co. Prices on applic'n
Common..... New nets
Clover leaf..... New nets

SAW BUCKS—See Bucks.

SAW SETS—See Sets

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 50
Common painted.... " 2 10

SCALES.

Counter.
Pelouze.....40&10%

SCISSORS.

Star.....60%

SCOOPS.

Grain.
½ bu. "Hercules"....per doz. 3 70
1-bu. "Hercules"..... " 5 00

SCRAPERS.

Box.
Triangular, No. 6....per doz. $6 25

Cabinet
Stearns' No. 8.....per doz. $10 00
" No. 9, Ball and Socket .. per doz. 11 25

Floor.
No. 10, Stearns'.....each $13 50

Road.
Cubic ft..... 7 5 3
With runners, ea. $7 00 6 50 6 20

SCREEN DOOR HINGES.

Cast iron.....gross, $13 00
Steel..... " 9 50

SCREWS.

Bench.
Iron, ins. 1 1½ 1½ 1½
$9 75 11 50 13 75 21 50
Wood, white maple...per doz. 6 00
Hand—Wood.....35%
Hand Rail.....22½%
Jack.....30-5%
Lag or Coach—all sizes, gimlet pointed.....50-10%

Saw—Centennial,
Nos..... 1 2 3 4
Per doz.....47c 55c 75c 90c

Wood
F. H. Bright.....70-10-10%
R. H. Blued.....65-10-10%
F. H. Jap'd.....62½-10%
F. H. Brass.....42½-10-5%
R. H. Brass.....40-10-5%
R. H. Nickel Plated.....57½-10%

SCYTHES.

Clipper, grass.....per doz. $13 50
Honest Dutchman.... " 13 70

SETS.

Nail.
Square head..... per doz. $1 25
Cup point, knurled.. " 1 15
Rivet.
Farmers'.....per doz. $2 10
Tinners'.....25%
Saw.
Aiken's Pattern.....per doz. $6 50
Disston's Monarch... " 7 20
Disston's X-Cut..... " 13 50
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X-Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X-Cut..... " 2 50
Stearns H'nd. No. 100 " 7 50
" X-cut, No. 103 " 17 50
" " No. 104 " 17 50
Whiting Pattern, No. 21 " 5 75
Eccentric Anvil, Hand, No. 395, N. P. Morrill Pattern, ...per doz. 11 50
Stearns Hand, No. 105, N. P. Morrill Pattern...per doz. 10 00

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Perfect.....1 20

SHAVES, SPOKE.

Stearns' No. 1.....per doz. $2 00
" No. 2..... " 4 00
" Nos. 3, 4, 5, 6.. " 3 50
" Nos. 7, 8..... " 4 50
" No. 9..... " 3 00

SHEARS.

Pruning.
Buckeye, No. 1.....per doz. $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat 0 01 14 012
Per doz...$1 40 2 10 2 90 2 80
Star.....per doz. $4 00
Sheep—No. BBA,
Inches..... 6 6½ 7
Reg. Grip.....$11 25 11 50 12 00
Nar. Grip., doz. 11 00 11 25 12 25
Star.....60%
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches.... 3 4 5
Per set..... $1 40 1 75 2 40
Hatfield's.
Per set....$1 80 2 10 2 75 4 25

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....60%

SHOES.

Conductor.....60%

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2, Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames', new list.....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk....Nets
National... " " ... "
Buckeye... " " ... "
Mohawk... " " ... "
Bar Drain & Ditching
Iwan's Perfection... .....$30 00
Railroad, etc.
Black Diamond.....per doz. Net
Crescent..... " "
Keystone..... " "
Star..... " "
Hollow Back..... " "
Ames', new list.....Discount, 12½%
Snow.
Galvanized, with wood handle, No. 56.....$1 45
No. 55..... 1 55
Alaska Steel.
D-Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted, 16x24..... Net
Enameled, White, 16x24..... "
Wrought Steel.
Painted, 16x24..... "

SLEDGES—See Hammers.

SNAPS, HARNESS.

Covered Spring.....Add 30%
Judd's Pattern.....Add 33⅓% to list

SNATHS.

Double Ring, Bush.....per doz. $9 75
Patent Loop, Bush..... " 10 00
Patent Loop, Grass.... " 8 75

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National..... .... .40&10%
Star.....50%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 2 3 4 5 6 7
Per doz..55c 60c 65c 75c 90c 1 00
Reliance.
Light Medium Heavy
Per doz..$1 55 2 10 3 20
Torrey's..... ...per doz. 1 65

SPRINKLERS, LAWN.

Stearns' No. 1.....per doz. $8 50

SQUARES.

Steel and Iron.....Nets new list
(Add, for bluing, $3.00 per doz., net.)
Mitre.....
Try..... Nets
Try and Bevel.....
Try and Miter.....
Fox's.....per doz. $6 00
Winterbottom's.....10%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 1 20
Iron frame, porc'n bowl " 1 90
Iron Frame, glass bowl.. " 2 35
Little Giant, tin'd iron.. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated.... " 4 50

STAPLES.

Blind.
Barbed.....per lb. 21@22c
Butter Tub..... " 16@19c
Fence—
Polished.....per 100 lbs. $5 45
Galvanized..... " 6 15
Netting.
Galvanized.....per 100 lbs. 6 50
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....50&10%
Extra heavy.... .....35%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb. New Nets
More Grit..... " "
Washita..... " "
Emery.
No. 126.....per doz. New Nets
Oil—Mounted.
Arkansas Hard No. 7 per doz. New Nets
Arkansas Soft..... " "
Washita No. 717... " "
Oil—Unmounted.
Arkansas Hard....per lb. New Nets
Arkansas Soft..... " "
Lily White..... " "
Queer Creek..... " "
Washita..... " "
Scythe.
Black Diamond....per gro. New Nets
Crescent..... " "
Green Mountain. " "
LaMoille..... " "
Extra Quinnebog. " "
Red End..... " "

STOPS, BENCH.

No. 10 Morrill pattern, per doz. $8 25
No. 11 Stearns " " 8 00
No. 15 Smith " " 5 25

STOPPERS, PLUE.

Common.....per doz. $1 10
Gem, flat, No. 3..... " 1 00
Gem, No. 1..... " 1 10

STOVE PIPE—See pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Skate.....per doz. 85c & $1 20

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
O. S. Elwood, No. 1...per doz. Nets
O. S. Elwood, No. 2.. " "

SWIVELS.

Malleable Iron.....per lb. $0 10
Wrought Steel.....per gro. 4 50

TACKS.

Bill Posters' 6-oz., 25 lb. boxes, per lb..... 17½c
Upholsters' 6-oz., 25-lb. boxes, per lb..... 18c

TAPES, MEASURING.

Asses' Skin.....List Net
Lufkin's Steel..... "
Lufkin's Metallic. List to list plus 20%
Lufkin's Pocket.....10%

THERMOMETERS.

Tin Case.....per doz. 80c@$ 1 25
Wood Back. . " $2 00@ 12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop, carload lots.....75&7%
" " less than car lots 70&15%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%

TRAPS.

Mole.
Reddick's.....per doz. $9 50
Game with Chains.
Victor No. 1.....$1 65
Oneida Jump No. 1..... 2 25
Newhouse No. 1..... 3 85
Mouse and Rat. Net per gross
Out O'Sight Mouse.....$ 8 00
" " Rat..... 15 00
" " Mole.....100 00
#44 Pocket Gopher..... 20 00
Victor Mouse..... 2 60
Hold Fast Mouse..... 2 60
Victor Rat..... 11 00
Hold Fast Rat..... ..... 11 00
Official Rat.... ..... 13 50
Wood Choker Mouse, 4 Holes 11 00

TROWELS.

Brick.
Clover Leaf 30%
Brade's.....15&5%
Disston's.....30%
Rose's.....Net
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....Net

TRUCKS.

Bag.....each, $3 75
Warehouse or store.
No..... 1 2 3
Half Ironed.... $5 00 6 50 9 40
Full Ironed..... 5 75 7 50 11 00

TUBS, WASH.

Standard, Wood, Ex.
Nos..... 3 2 1 large
Perdoz...$9 50 11 25 12 75 15 50
Galvanized.
No..... 1 2 3
Per doz.....15 20 13 25 20 00

TWINE.

Market Quotation
3-ply Cotton Wrapping..... ....
4 " " .....
4 Extra Wrapping.....
4 " Hvy. Wrapping..
4 " Wrapping on tubes...
3 " " cones...
4 " " " ...
India Hemp, ½-lb. balls, No. 18..
2-ply Jute, 1-lb. balls.....
Seins. Market
Soft.....per lb ..... Quotation
Med..... " ..... "
Hard.... " ..... "
Staging, ½-lb. ball, size 21..... "
" " " 24..... "
" " " 27..... "
Bagging, ½-lb ball..... "
3-ply, "B" in hanks..... "
4- " "B" " ..... "
3- " "A" " ..... "
3- " Silver Finish, in hanks... "
Fodder or Lath.
130 strand..... "

VISES.

No. 21, Hand..... $4 50
Oval Slide,
Inches 2 2½ 3 3½ 4½
Each $2.00 $2.25 $2.55 $4.10 $7.00
No. 0, Stearns' Saw, common pattern.....per doz. $6 25
No. 3, Stearns' Saw, common pattern.....per doz. 10 50
No. 4 Stearns' Saw, common pattern.....per doz. 11 50
No. 5, Stearns' Saw, Ball and Socket pattern.....per doz. 16 00
No. 1, Genuine Wentworth, Noiseless Saw.....per doz. 10 50
No. 2, Genuine Wentworth, Noiseless Saw.....per doz. 16 25
No. 3, Genuine Wentworth, Noiseless Saw.....per doz. 14 25
No. 500, All Steel Folding Saw .....per doz. 10 50

WARE.

Glue Pots.
Tinned.....Add 15% to list
Enameled.....30%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per lb. 3½c
Wrought steel in 5-lb. boxes, per lb.:
In 3/16 ¼ 5/16 ⅜ ½ ⅝ ¾ ⅞ 1
18c 16c 15c 13c 12c 11½c 11c 11c 11c

WEDGES.

Ax..... ....per doz. Nets
Galling.....per lb. "
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz. 1 85 to 2 40
Carroll's, per doz.... 3 00 to 3 75
Hoosier, per doz..... 3 50 to 4 60
Shaw Perfected..... 3 00 to 3 75

WEIGHTS.

Hitching.....per lb. Nets
Sash—f.o.b. Chicago
Ton lots, per ton.....$44 00
Smaller lots, per ton..... 46 00

WHEEL BARROWS.

No. 4 Tubular Steel.....@ $7 00
Common Tray or Stave Tray @ 2 25
Angle leg, garden..... @ 4 00

WHEELS.

Carborundum.....50%
Emery.....60%
Well. Ins..... 8 10 12
Per doz.....$5 50 7 25 8 50
12 in. heavy hoisting, per doz. $25 00

WIRE.

Brass.
In coils.....Nets
In 1-lb. spools, new list.....Nets
Broom—Tinned.....Nets
Cable—Same price as Barbed Wire.
Copper.
In coils.....Nets
1-lb. spools, new list.....Nets
Fence—Smooth. An'cal'd Galv'd
Nos. 6 to 9, less than car, per 100 lbs....$4 25 $4 95
Hair—New List.....40&10%
Market. Market Quotations
Bright, full bdles..... "
Bright, broken bdles..... "
Coppered, full bdles..... "
Coppered, broken bdles..... "
Tinned, full bdles..... "
Tinned, broken bdles..... "
Picture—In coils.....80%@80&10%
In 5-lb. spools.....per lb.....26c

WRENCHES.

Acme Standard.....50&10%
Alligator No. 1.....90c net
Always Ready.....30%
Agricultural.....50&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....60%
Bemis & Call's:
Adjustable S, 15%; Adjustable S Pipe, 15%; Briggs' Pattern, 10%
Combination Bright.....20%
Steel Handle Nut.....20%
Combination Black.....20%
Merrick Pattern.....20%
Knife Handle Pattern.
No. 62, Screw Wrench. List, plus 5%
No. 60, Steel Handle.. "

WRINGERS.

No. 790, Guarantee....per doz. $58 00
No. 770, Bicycle..... " 54 00
No. 110, Domestic..... " 47 50
No. 110, Brighton..... " 43 50
No. 740, Bicycle ..... " 54 00
No. 22, Domestic.... " 47 50
No. 22, Pioneer..... " 43 50
No. 770B, Bicycle..... " 82 00
No. 781B Guarantee... " 91 00

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Brakes—Cornice.
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Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.

Brass and Copper.
Hussey & Co., C. G., Pittsburgh, Pa.

Ceiling—Metal.
Burton Co., W. J., Detroit, Mich.
Friedley-Voshardt Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.
Whitaker-Glessner Co., Wheeling, W. Va.

Clips—Damper.
Stover Mfg. & Engine Co., Freeport, Ill.

Coppers—Soldering Gas.
Allen Co., Inc., L. B., Chicago, Ill.

Cornices.
Burton Co., W. J., Detroit, Mich.
Friedley-Voshardt Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.

Cut-Offs—Rain Water.
Sullivan-Geiger Co., Indianapolis, Ind.

Dampers.
Stover Mfg. & Engine Co., Freeport, Ill.

Elevators.
Kimball Bros. Co., Council Bluffs, Iowa

Enamel—Iron.
Black Silk Stove Polish Co., Sterling, Ill.

Fence Gates.
American Steel & Wire Co., Chicago, Ill.

Files.
Delta File Wks., Philadelphia, Pa.
Heller Bros. Co., Newark, N. J.

Flux—Soldering.
Allen Co., Inc., L. B., Chicago, Ill.

Furnaces—Soldering.
Ashton Mfg. Co., Newark, N. J.
Bernz, Otto, Newark, N. J.
Burgess Soldering Furnace Co., Columbus, Ohio.
Clayton & Lambert Mfg. Co., Detroit, Mich.
Ringen Stove Co., St. Louis, Mo

Hammers.
Atkins & Co., E. C., Indianapolis, Ind.

Handles—Boiler.
Berger Bros. Co., Philadelphia, Pa.

Heaters—Gas.
Nye & Son Co., A. T., Columbus, Ohio.

Heaters—School Room.
Haynes-Langenberg Mfg. Co., St. Louis, Mo.
Monroe Fdry. & Furnace Co., Monroe, Mich.
Peerless Foundry Co., Indianapolis, Ind.
Standard Furnace & Supply Co., Omaha, Neb.

Heaters—Warm Air.
Forest City Fdy. & Mfg. Co., Cleveland, Ohio.
Haynes-Langenberg Mfg. Co., St. Louis, Mo.
Henry-Miller Foundry Co., Cleveland, Ohio.
Hess-Snyder Co., Massillon, Ohio.
Kansas City Furnace Co., Kansas City, Mo.
Keith Furnace Co., Des Moines, Iowa.
Mahoning Foundry Co., Youngstown, Ohio.
May-Fiebeger Furnace Co., Newark, Ohio.
Modern Way Furnace Co., Fort Wayne, Ind.
Monroe Fdy. & Furnace Co., Monroe, Mich.
Peerless Foundry Co., Indianapolis, Ind.
Scheible-Moncrief Heater Co., Cleveland, Ohio.
Schill Bros. Co., Crestline, Ohio.
Schwab & Sons Co., R. J., Milwaukee, Wis.
Standard Furnace & Supply Co., Omaha, Neb.
Tubular Heating & Ventilating Co., Philadelphia, Pa.
XXth Century Heating & Ventilating Co., Akron, Ohio.
Utica Heater Co., Chicago-New York
Wise Furnace Co., Akron, Ohio.
Wrought Iron Range Co., St. Louis, Mo.

Horse Shoes.
American Steel & Wire Co., Chicago, Ill.

Jobbers—Hardware.
Bullard & Gormley Co., Chicago, Ill
Clark-Smith Hdw. Co., Peoria, Ill.

Lath—Expanded Metal.
Milwaukee Corrugating Co., Milwaukee, Wis

Machinery—Culvert.
Bertsch & Co., Cambridge City, Ind.

Machines—Crimping.
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N. Y.

Machines—Razor Blade.
Hyfield Mfg. Co., New York, N. Y

Machines—Sheet Metal.
Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N. Y.

Machines—Stove Pipe.
Hemp & Co., St. Louis, Mo.

Metals—Perforated.
Harrington & King Perforating Co., Chicago, Ill.

Mica.
Munsell & Co., Eugene, New York-Chicago

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Friedley-Voshardt Co., Chicago, Ill.

Motorcycles.
Johnson's Arms & Cycle Works, Iver, Fitchburg, Mass.

Nails—Slating.
Hussey & Co., C. G., Pittsburgh, Pa

Nails—Wire.
American Steel & Wire Co., Chicago, Ill

Ornaments—Sheet Metal.
Friedley-Voshardt Co., Chicago, Ill.

Patterns—Stove.
Cleveland Castings Pattern Co., Cleveland, Ohio.
Cope-Swift Co., Inc., Detroit, Mich.
Quincy Pattern Co., Quincy, Ill.
Vedder Pattern Wks., Troy, N. Y.

Pipes and Fittings—Furnace.
Henry-Miller Fdry. Co., Cleveland, Ohio.
Lamneck Co., W. E., Columbus, Ohio.
Meyer & Bro. Co., F., Peoria, Ill.
Michigan Safety Furnace Pipe Co., Detroit, Mich.
Standard Furnace & Supply Co., Omaha, Neb.
Stearns Register Co., Detroit, Mich.

Pipe and Fittings—Stove.
Hemp & Co., St. Louis, Mo.
Meyer & Bro. Co., F., Peoria, Ill.
Michigan Safety Furnace Pipe Co., Detroit, Mich.
Sullivan-Geiger Co., Indianapolis, Ind.
Whitaker-Glessner Co., Wheeling, W. Va.

Pipe—Conductor.
Berger Bros. Co., Philadelphia, Pa.
Burton Co., W. J., Detroit, Mich.
Clark-Smith Hdw. Co., Peoria, Ill.
Friedley-Voshardt Co., Chicago, Ill.
Hussey & Co., C. G., Pittsburgh, Pa.
Whitaker-Glessner Co., Wheeling, W. Va.

Polish—Metal.
Black Silk Stove Polish Co., Sterling, Ill.

Polish—Stove.
Black Silk Stove Polish Co., Sterling, Ill.

Posts—Steel Fence.
American Steel & Wire Co., Chicago, Ill.

Punches.

Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Wks., Buffalo, N. Y.

Punches—Hand.

Whitney Mfg. Co., W. A., Rockford, Ill.

Ranges — Combination Gas and Coal.

Ringen Stove Co., St. Louis, Mo.

Ranges—Gas.

Nye & Son Co., A. T., Columbus, Ohio.

Rasps.

Delta File Wks., Philadelphia, Pa.
Heller Bros. Co., Newark, N. J.

Registers—Warm Air.

Hart & Cooley Co., New Britain, Conn
Henry-Miller Foundry Co., Cleveland, Ohio.
Standard Furnace & Supply Co., Omaha, Neb.
Stearns Register Co., Detroit, Mich.

Revolvers.

Johnson's Arms & Cycle Works, Iver, Fitchburg, Mass.

Roasters.

Whitaker-Glessner Co., Wheeling, W. Va.

Rolls—Forming.

Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.

Roofing—Iron and Steel.

American Sheet & Tin Plate Co., Pittsburgh, Pa.
Burton Co., W. J., Detroit, Mich.
Cortright Metal Roofing Co., Philadelphia, Pa.
Friedley-Voshardt Co., Chicago, Ill.
Inland Steel Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.
Stark Roling Mill Co., Canton, Ohio.
Whitaker-Glessner Co., Wheeling, W. Va

Rubbish Burners.

Hart & Cooley Co., New Britain, Conn.

Rules.

Lufkin Rule Co., Saginaw, Mich.

Saws.

Atkins & Co., E. C., Indianapolis, Ind.

Schools — Sheet Metal Pattern Drafting.

National School of Sheet Metal Pattern Drafting, St. Louis, Mo.

Shotguns.

Johnson's Arms & Cycle Works, Iver, Fitchburg, Mass.

Screens—Perforated Metal.

Harrington & King Perforating Co., Chicago, Ill.

Sheets—Black and Galvanized.

American Sheet & Tin Plate Co., Pittsburgh, Pa.
Dearborn Steel & Iron Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, Ohio.
Whitaker-Glessner Co., Wheeling, W. Va.

Sheets—Toncan Metal.

Stark Rolling Mill Co., Canton, Ohio.

Skylights.

Burton Co., W. J., Detroit, Mich.

Snips—Tinsmiths'.

Niagara Machine & Tool Works, Buffalo, N. Y.

Solder.

Allen Co., Inc., L. B., Chicago, Ill.

Soldering Iron—Self-Heating.

Allen Co., Inc., L. B., Chicago, Ill.

Soldering Supplies.

Allen Co., Inc., L. B., Chicago, Ill.

Specialties—Hardware.

Atkins & Co., E. C., Indianapolis, Ind.
Delta File Wks., Philadelphia, Pa.
Heller Bros. Co., Newark, N. J.
Hyfield Mfg. Co., New York, N. Y.
Lufkin Rule Co., Saginaw, Mich.
Stover Mfg. & Engine Co., Freeport, Ill.

Statuary.

Friedley-Voshardt Co., Chicago, Ill.

Sticks—Soldering.

Allen Co., Inc., L. B., Chicago, Ill.

Stoves—Gasoline and Kerosene.

Ringen Stove Co., St. Louis, Mo.

Stores—Laundry.

Nye & Son Co., A. T., Columbus, Ohio.

Stoves and Ranges.

Nye & Son Co., A. T., Columbus, Ohio.
Ringen Stove Co., St. Louis, Mo.
Schill Bros. Co., Crestline, Ohio.

Stove Pipe Reducer.

Sullivan-Geiger Co., Indianapolis, Ind.

Tacks, Staples, Spikes.

American Steel & Wire Co., Chicago, Ill.

Tapes.

Lufkin Rule Co., Saginaw, Mich.

Tiles and Shingles—Metal.

Burton Co., W. J., Detroit, Mich.
Cortright Metal Roofing Co., Philadelphia, Pa.
Milwaukee Corrugating Co., Milwaukee, Wis.
Whitaker-Glessner Co., Wheeling, W. Va.

Tin—Perforated.

Harrington & King Perforating Co., Chicago, Ill.

Tinplate.

American Sheet & Tin Plate Co., Pittsburgh, Pa.
Whitaker-Glessner Co., Wheeling, W. Va.

Tools—Carpenters'.

Atkins & Co., E. C., Indianapolis, Ind.
Lufkin Rule Co., Saginaw, Mich.

Tools—Sheet Metal.

Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Whitney Mfg. Co., W. A., Rockford, Ill.

Tools—Tinsmiths'.

Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.

Torches.

Allen Co., Inc., L. B., Chicago, Ill.
Ashton Mfg. Co., Newark, N. J.
Bernz, Otto, Newark, N. J.
Burgess Soldering Furnace Co., Columbus, Ohio.
Clayton & Lambert Mfg. Co., Detroit, Mich.

Transit Companies.

Cleveland & Buffalo Transit Co., Cleveland, Ohio

Troughs—Eaves.

Berger Bros. Co., Philadelphia, Pa.
Burton Co., W. J., Detroit, Mich.
Milwaukee Corrugating Co., Milwaukee, Wis.
Whitaker-Glessner Co., Wheeling, W. Va.

Ventilators.

Berger Bros. Co., Philadelphia, Pa.
Friedley-Voshardt Co., Chicago, Ill.
Standard Ventilator Co., Lewisburg, Pa.

Ventilators—Ceiling.

Hart & Cooley Co., New Britain, Conn.

Weatherstrips.

Burlington Blanket Co., Burlington, Wis.

Wood Faces.

Dover Wood Face & Lbr. Co., Dover, Ohio.

¶ **ADVERTISING** is the power of an idea multiplied.

¶ Other powers lose by expansion. Steam is power only when confined. Electricity radiated and diffused becomes nothing. Sound dies with distance. Great suns pale into invisible stars, and the power of light itself is lost in infinite space. But the strange power of advertising increases by expansion. Diffusion is its life. It grows by what it imparts.

¶ The advertised idea, to become a power, must be genuine, vital, and related to the function of a meritorious business; and the means of its furtherance must be well chosen.

¶ To choose well the means for the furtherance of *your* advertised idea, in order that it may become a power, in order that you may show its genuineness as a vital factor of your business, is not hard.

¶ A close perusal from cover to cover of this week's issue of **AMERICAN ARTISAN AND HARDWARE RECORD 620 So. Michigan Ave. Chicago, Illinois** will disclose abundant evidence of this fact.

WANTS AND SALES

For paid yearly subscribers, AMERICAN ARTISAN AND HARDWARE RECORD will insert under this head advertisements of not more than fifty words *WITHOUT CHARGE.* Employers wishing to secure employes, parties desiring to purchase or sell business, secure partners or to exchange, etc., will find that these pages offer excellent opportunities to satisfy their wants. Clerks and tinsmiths looking for situations will find it to their advantage to use these columns. Those who respond to these announcements please mention that they "READ THE ADVERTISEMENT IN AMERICAN ARTISAN AND HARDWARE RECORD."

BUSINESS CHANCES

Wanted—Safe, cash register and store fixtures. Elskamp and Wiedmann, Potosi, Wisconsin. 25-3t

Wanted—Hardware fixtures and show cases, cash register, adding machine. Give good description and state prices. H. L. Francisco, Intake, Montana. 26-3t

Wanted to Buy — Hardware business in good growing town of 3,000 population or over, within one hundred miles of Chicago. Please address replies to C-22, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan, Boulevard, Chicago, Illinois. 26-3t

For Sale—Only plumbing, heating and sheet metal business in town of 1,500 population. City water and sewer system; good town and country; plenty of work; good reason for selling. If you are looking for a good business write to J. E. Fitzwater, Rossville, Illinois. 26-3t

For Sale—Patent on improved style self cleaning tobacco knife. We have one of the best patents in this line ever granted. Live manufacturers should get the full particulars and copy of patent papers. Write today. We will sell United States rights. J. H. Otto and Ed C. Young, Kellogg, Idaho. 26-3t

For Sale—A good clean stock of hardware and stoves. Doing a fine business. County seat town and good farming country. A good proposition if sold by July 1. Central Iowa. Good reason for selling. Please address C-19, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 24-3t

Wanted by September 1st — Reliable tinner desires to rent small shop and tools or shop to run on a percentage basis. Prefer live Southwestern town where there is work. If interested please write, giving full particulars, to C-20, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 25-3t

Well Established Stove Line Open for Michigan on Commission Basis—We are looking for a wide-awake, successful manufacturer's agent operating on a strictly commission basis and having no other obligations or ties that would prevent him from devoting to this line the energy and efforts it deserves.

This line now enjoys an extensive sale throughout the State. It's all clean-cut business, obtained strictly on merits. The business already established will pay an attractive salary. And the kind of man we are looking for can increase the present business materially.

The volume and possibilities of this business is such that first-class reference as to ability must be required. Also full information as to how long territory has been covered, how often and how closely it is worked and any other qualification possessed. Address Post Office Box No. 267, Quincy, Illinois. 23-4t

Wanted—Men who know their trade from A to Z. That's the way the advertisements for Help Wanted start. You can learn more about your trade if you read good books on the subjects you are less familiar with. For a book covering the subject of Warm Air Heating thoroughly, you should read Snow's Furnace Heating, 284 pages. Price $2.50. With AMERICAN ARTISAN one year (52 issues), $3.85. Order your copy today from Daniel Stern, 620 South Michigan Avenue, Chicago, Illinois.

HELP WANTED

Wanted — First-class tinner. Steady work; good wages. Porter-Hurlbert Hardware Company, Frankfort, Indiana. 25-3t

Wanted—Tinners and men to install warm air furnaces. Mohr-Jones Hardware Company, Racine, Wisconsin. 25-3t

Wanted at Once—Tinner for inside and outside work. Good pay for a good man. Chas. F. Lumm, Garrett, Indiana. 24-3t

Wanted—Tinners and sheet metal workers for inside and outside work. Steady job. National Cornice Company, Lima, Ohio. 26-3t

Wanted — Combination tinner and plumber. Open shop. Will pay top wages. Stanek Hardware Company, Libertyville, Illinois. 24-3t

Wanted—Tinner. Steady work for the right man. Will pay from 50c up. Benton Sheet Metal and Furnace Works, Benton Harbor, Michigan. 25-3t

Wanted — Good reliable combination tinner and plumber. Steady work and good wages. Shop with plenty of light. H. E. Flesher, Lexington, Illinois. 26-3t

Wanted—First-class mechanic to do tinning, plumbing and heating. Steady work to a good man in a good town. Siders & Hughes, Bement, Illinois. 24-3t

Wanted — An experienced hardware clerk. Give age, experience and references and state wages wanted in first letter. H. H. Toman, Cherokee, Iowa. 24-3t

Wanted—Tinner. Must be good furnace man. Union shop. Steady work. Telephone or write at once to G. B. Watrous Sons. Telephone number 71, Waukegan, Illinois. 26-3t

Wanted—We can use ten good furnace installers and combination tinners and plumbers for ourselves or our retail dealers. Campbell Heating Company, Des Moines, Iowa. 26-3t

Wanted at Once—Competent tinner. Must be first-class and all around. Will pay 62½c per hour to right man. B. & M. Sheet Metal Works, 209 Cave Springs Avenue, El Dorado, Kansas. 26-3t

Wanted at Once—First-class all around plumber and tinner who can do hot air, steam and hot water heating. Wages 75c per hour. Steady work the year around. Apply to Carl Heinzelman, Midland, Michigan. 24-3t

Wanted—A competent hardware clerk. Married man preferred. State age, wages desired, etc. Address replies to C-23, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 26-3t

Wanted—Tinner or all around man for furnace, plumbing, pump and windmill work, heating jobs. Married man preferred. State wages and experience in first letter. Will hire by day or year. E. L. Severson, Hollandale, Wisconsin. 26-3t

Wanted at Once—Two good men, one a plumber and furnace fitter, and one a combination tinner and electrician. None but first-class men need apply. Good salary and steady positions for both men. Chas. L. Knowles, Kingsley, Iowa. 25-3t

Wanted—Tinners on dairy work. Good solderers. Married men preferred. No objection to age if you can handle job. Best of wages. 10 hours a day and five on Saturday during summer and nine in winter. Clinton Mfg. Company, Clinton, Wisconsin. 24-3t

Wanted at Once—Man in hardware store to do tinning repair work, inside and out, repair well pumps; drive truck, etc. Will pay $20.00 a week this year and more as you become acquainted with the trade. Good town. Geo. Collier and Son, Farmer City, Illinois. 25-3t

Wanted—First-class combination tinner and plumber; one who can install furnaces, repair pumps and take care of all work such as comes up in a country town of 1,000 population. Steady job year around for a good man. State wages wanted. W. Wilker, Wyoming, Iowa. 24-3t

Wanted—Man capable of taking charge of furnace shop located in eastern Nebraska. Best of wages and working conditions good. State experience, age and wages wanted in first letter. Address C-21, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 26-3t

HELP WANTED

Wanted—A good all around tinner and furnace man. Steady job for the right man. Leffingwell Mercantile Company, Brighton, Colorado. 25-3t

Wanted—A first-class tinner and plumber at once. Wages $30.00 per week. Steady work the year around to good man. Have best equipped shop in Central Texas. Write to F. Kutzschbach, Taylor, Texas. 25-3t

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Situation Wanted—By an all around tinner in open shop. County seat town. Furnace work preferred. No plumbing. Fred E. Wittbecker, 95 Van Buren Street, Freeport, Illinois. 25-3t

Situation Wanted—By an all around tinner and furnace man of fifteen years' experience, to take charge of shop. State wages you will pay in first letter. Address C-24, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 26-3t

Situation Wanted—By an all around heating and ventilating man who has been doing road work for the last seven years and would like to get in touch with some reliable firm that is in need of a man with my experience. Address C-18, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Boulevard, Chicago, Illinois. 24-3t

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Wanted—One used 2¾" or 3"x48" hand or power tinners' rollers. Sterling Sheet Metal and Roofing Company, Sterling, Colorado. 26-ufn

For Sale—Tinners' Tools—Second hand 30" square shears, rolls, folder, stakes, etc. A. M. Finckh, 225 South Union, Lima, Ohio. 26-3t

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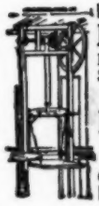

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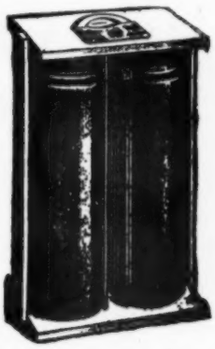

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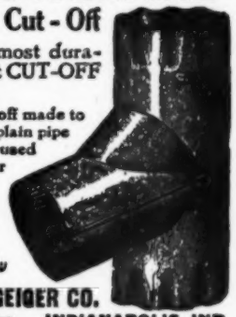

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